

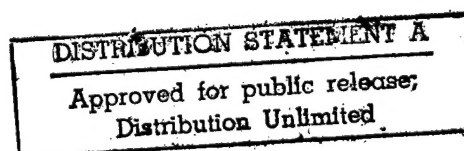
September 1997

# U.S. AGRICULTURAL EXPORTS

## Strong Growth Likely But U.S. Export Assistance Programs' Contribution Uncertain



19971014 085





United States  
General Accounting Office  
Washington, D.C. 20548

National Security and  
International Affairs Division

B-277683

September 30, 1997

The Honorable John K. Kasich  
Chairman, Committee on the Budget  
House of Representatives

Dear Mr. Chairman:

Domestic agricultural policy in the United States was significantly changed by the 1996 Federal Agriculture Improvement and Reform (FAIR) Act (P.L. 104-127, Apr. 4, 1996). Although it continues to provide income support to farmers for the next 5 years, FAIR reduces the government's role in regulating the production of bulk commodities such as wheat and corn and provides the agricultural sector and farmers enhanced flexibility to respond to domestic and international market conditions.

In response to your request, we assessed (1) the way in which FAIR will likely affect U.S. agricultural exports and (2) the continued relevance of U.S. agricultural export assistance programs. To address FAIR's potential impact on U.S. exports, we interviewed a wide range of U.S. and competitor nation agricultural experts, analyzed available studies and reports authored by some of these experts, and reviewed and discussed the agricultural trade components of various economic models. To evaluate the programs' relevance, we reviewed both qualitative and quantitative evidence regarding the extent to which the programs benefit the overall U.S. economy, benefit the U.S. agricultural sector and specific U.S. commodities, counter competitor nations' agricultural export programs, and promote U.S. trade negotiating objectives.

## Background

Agriculture is an important component of U.S. trade. Agricultural exports accounted for \$60 billion, or 7 percent, of all U.S. exports (merchandise and service) in fiscal year 1996, while agricultural imports accounted for \$32.4 billion, or 3.4 percent, of all U.S. imports. The agricultural sector consistently generates an annual trade surplus, which in fiscal year 1996 was \$27.4 billion, according to the U.S. Department of Agriculture (USDA). In addition, the financial well-being of the U.S. agricultural sector has become increasingly linked to its export opportunities. Exports represent about 20 percent, by value, of U.S. agricultural production and the equivalent of one-third of total harvested U.S. acreage. For example, in 1996, 57 percent of the U.S. wheat crop was shipped overseas, as well as 47 percent of the rice and 43 percent of the cotton crop. U.S. agricultural

exports also contribute to U.S. employment. According to the Economic Research Service (ERS) of USDA, \$55.8 billion in agricultural exports in 1995 supported about 950,000 jobs in the United States, with 365,300 of those jobs occurring in the farm sector and 584,700 occurring in the nonfarm sector. The total jobs supported represent less than 1 percent of U.S. civilian employment, but the farm sector jobs supported by exports represent about 15.5 percent of the sector's total employment.

The U.S. government has actively sought to expand U.S. agricultural exports through negotiations to reduce foreign trade barriers and through subsidies, market promotion, food aid, and loan guarantees. From 1985 to 1996, the U.S. government has spent \$9 billion on export subsidies, \$2.3 billion on market promotion, and \$7.8 billion on food aid and has guaranteed \$53.1 billion in export loans (all in constant fiscal year 1996 dollars).<sup>1</sup> Between fiscal years 1980 and 1997, the U.S. government paid out approximately \$2.1 billion in export credit guarantee claims against these loans because of loan repayments that were in default and have not been rescheduled.<sup>2</sup> Between 1989 and 1993, about 20 percent by value of U.S. agricultural exports received some government assistance.

USDA has four types of agricultural export assistance programs. All share the objective of increasing U.S. agricultural exports. And two—export subsidies and market promotion programs—are intended to directly counter competitor agricultural export assistance. Prior to FAIR, most of these programs also helped the U.S. government in a budgetary sense by (1) reducing government-held stocks of surplus grain generated by U.S. domestic agricultural programs<sup>3</sup> and (2) helping to offset the cost of U.S. domestic agricultural price supports.<sup>4</sup> Successive farm bills and market

<sup>1</sup>These figures exclude the operational cost of the USDA's Foreign Agricultural Service (FAS). In fiscal year 1995, FAS had an operating budget of about \$118 million to manage its various agricultural export assistance programs and carry out its overseas functions (such as the gathering of information on competitor nations' agricultural exporting efforts).

<sup>2</sup>See *Addressing the Deficit: Budgetary Implications of Selected GAO Work for Fiscal Year 1998* (GAO/OCG-97-2, Mar. 14, 1997).

<sup>3</sup>Prior to FAIR, as one way to maintain domestic prices (and thus farmers' income) for government-supported crops, the U.S. government acquired large amounts of these crops. Export programs, such as export subsidies, helped reduce the need for the government to acquire supported crops by increasing global demand for these products (which in turn raised their domestic price). Because FAIR decouples the link between domestic prices and farmers' income, the U.S. government no longer acquires surplus agricultural commodities.

<sup>4</sup>Prior to FAIR, price support payments (also known as "deficiency payments") were made when the market price for a government-supported crop fell below the USDA target price. Export programs, such as credit guarantees, helped reduce price support payments by increasing global demand for some U.S. products. This, in turn, helped raise the domestic prices of these products. With FAIR, this budgetary offset no longer exists.

conditions have reduced expenditures for U.S. agricultural export assistance programs. For example, total funding for these programs has decreased from \$2.1 billion in fiscal year 1992 to \$792 million in fiscal year 1996. The four types of programs include the following:<sup>5</sup>

(1)Export subsidy programs that lower the price of U.S. commodities on the world market: the Export Enhancement Program (EEP) and the Dairy Export Incentive Program (DEIP).<sup>6</sup> EEP expenditures for fiscal year 1996 were \$5 million. Due to high market prices in 1996, EEP's authorized program level of \$350 million was not fully utilized. DEIP expenditures for fiscal year 1996 were \$20 million.

(2)Export credit programs that offer short- and intermediate-term loan guarantees to lower the cost of borrowing for importing countries to purchase U.S. agricultural exports: the Export Credit Guarantee program (the General Sales Manager (GSM)-102) and the Intermediate Export Credit Guarantee program (GSM-103). These were jointly authorized to expend not less than a total of \$5.5 billion in guarantees and, in fiscal year 1996, actually guaranteed exports valued at \$3.1 billion and \$151 million, respectively.<sup>7</sup>

(3)Export promotion programs that attempt to develop, maintain, and expand foreign markets for U.S. agricultural products through funding for advertising and other market promotion: the Foreign Market Development Program (FMDP—also known as the Cooperator Program) and the Market Access Program (MAP). A program level of up to \$34 million and \$90 million, respectively, was approved for these programs for fiscal year 1996.<sup>8</sup>

(4)Food aid programs that provide U.S. agricultural commodities to developing countries through either concessional loans that offer long-term credit with below-market interest rates, such as the Public

<sup>5</sup>See appendix I for further information on the programs' funding levels.

<sup>6</sup>Two other export subsidy programs, the Sunflowerseed Oil Assistance Program (SOAP) and the Cottonseed Oil Assistance Program (COAP), were not reauthorized by FAIR.

<sup>7</sup>GSM-102 guarantees repayment of short-term financing (up to 3 years), while GSM-103 guarantees repayment of intermediate-term financing (3 to 10 years) to eligible countries that purchase U.S. farm products.

<sup>8</sup>MAP was preceded by two similar market promotion programs named the Market Promotion Program and the Targeted Export Assistance program.

---

Law 480<sup>9</sup> title I concessional sales program, or grants for market development purposes, such as the Food for Progress grant program. These programs had expenditures of \$219 million and \$107.7 million, respectively, for fiscal year 1996.

Farm legislation of 1985 and 1990 brought about market-oriented reforms in domestic agricultural policy. These reforms helped reduce the market-distorting impact of government-established price supports and diminished government holding of surplus stocks. The 1996 FAIR Act expands on market-oriented provisions of previous legislation and for many commodities ends the tying of direct farm income support to production decisions. FAIR is also consistent with U.S. commitments to the Uruguay Round Agreement on Agriculture,<sup>10</sup> which reduces domestic and export agricultural assistance worldwide. While the act provides government income support payments to farmers through 2002, these payments are now largely independent from farmers' planting decisions.<sup>11</sup> With the new flexibility, producers' planting decisions are to be increasingly driven by market conditions (domestic and international) rather than by government programs.

Concurrent with these changes, the 1996 FAIR act reauthorized all four types of export assistance programs, with some operational modifications aimed at making the programs more focused on market development. Two changes that FAIR made to the export programs, which USDA officials state will increase program flexibility, were to authorize (1) the GSM program to provide credit to private importers in qualified nations and (2) title I concessional loans to private entities in addition to foreign governments. They believe these provisions are responsive to changes in the global trading environment. For example, a trend in some nations in Latin America, Asia, and Europe is toward less government control of markets and a greater reliance on the private sector.

Finally, the Uruguay Round Agreement on Agriculture permits the continued use of export subsidies (though reduced from historical levels)

---

<sup>9</sup>The Agricultural Trade Development and Assistance Act of 1954 (P.L. 83-480, July 10, 1954), commonly known as P.L. 480.

<sup>10</sup>With the completion of the Uruguay Round of multilateral trade negotiations in 1994, member countries of the General Agreement on Tariffs and Trade (GATT) agreed to a variety of measures to liberalize global agricultural trade.

<sup>11</sup>One exception is that program beneficiaries are prohibited from increasing fruit and vegetable planting on program acreage. According to an agricultural expert, this exception is designed to protect traditional U.S. fruit and vegetable growers, whose products' prices could fall due to an increase in cultivation of only a few hundred thousand acres.

and other forms of agricultural export assistance, such as market development and promotion efforts, export credit guarantees, and concessional loans to developing countries. And, our competitors continue to use Uruguay Round allowable agricultural export assistance. For instance, in fiscal year 1996, USDA estimated that the European Union (EU)<sup>12</sup> spent over \$9 billion on agricultural export subsidies,<sup>13</sup> as compared to the \$792 million the United States spent on all export assistance in that same year.<sup>14</sup> Thus, world agricultural trade remains greatly influenced by government policies and programs.

## Results in Brief

Agricultural experts generally expect that FAIR's domestic policy reforms will modestly contribute to increased U.S. agricultural exports. The extent to which FAIR's domestic reforms increase exports is dependent on the degree to which farmers add additional land to production and use FAIR's planting flexibility to respond to international and domestic market conditions. Independent of FAIR, U.S. government and private forecasters are predicting strong growth of U.S. exports driven largely by favorable international market conditions and the general competitiveness of many U.S. agricultural products. Much of the forecasted growth in U.S. agricultural exports is expected to come from (1) the anticipated rise in income levels in East and Southeast Asian nations and other regions and (2) the liberalization of agricultural markets brought about by the 1994 Uruguay Round trade agreements, which brought agriculture under multilateral disciplines (practices) for the first time, and by unilateral policy changes of other nations.

FAIR's domestic policy reforms remove a primary benefit associated with most U.S. export assistance programs—the exporting of surplus stocks generated by domestic price supports. Nevertheless, program proponents, including USDA and some industry groups, maintain that U.S. agricultural export assistance programs have continued relevance because they benefit the overall U.S. economy, benefit the U.S. agricultural sector, counter competitor nations' agricultural export programs, and promote U.S. trade negotiating objectives.

<sup>12</sup>The EU, since January 1, 1995, includes Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

<sup>13</sup>According to USDA, broad EU support of its domestic producers results in high internal prices, thus requiring high levels of export subsidies to make EU agricultural products competitive in world markets.

<sup>14</sup>Total U.S. expenditures in fiscal year 1996 include the monies spent on EEP, DEIP, MAP, FMDP, and the subsidized component of the GSM programs as computed to comply with the Federal Credit Reform Act of 1990 (P.L. 93-344, July 12, 1974, as amended by title XIII, sec. 13201(a) of P.L. 101-508, Nov. 5, 1990).

While the evidence is mixed regarding the continued relevance of U.S. export assistance programs, such assessments are difficult. In particular, assessing the benefits of these programs is necessarily limited largely to research and program participants' past experience. Program performance under past conditions may not always be helpful in predicting future program relevance because of changing conditions in the global trading environment, such as Uruguay Round trade liberalization, or the potential for commodity supply and price volatility. Nevertheless, using applicable economic research and expert opinion, our review provides an indication of these programs' future contribution in four key areas.

- With regard to the U.S. economy, no conclusive evidence exists that these programs have measurably expanded aggregate employment and output or reduced the trade and budget deficits. Export programs could potentially expand the economy in cases where markets do not operate efficiently. However, economic evidence suggests that the federal government's ability to influence the overall U.S. economy in the short run comes primarily through making changes in either fiscal policy, such as the overall levels of government expenditures and taxation, or Federal Reserve monetary policy. Moreover, government export programs largely reallocate production, employment, and income between sectors.
- Concerning the U.S. agricultural sector, while U.S. agricultural export assistance programs may provide some income and employment benefits to the sector, there is limited evidence of these benefits. Further, while there is some evidence that these programs have increased exports to targeted markets, such as China, the research also shows that the additional exports that these programs have provided worldwide have been relatively small.
- Regarding competitor nations' programs, the lack of transparency (openness) in these nations' agricultural export assistance efforts makes it difficult to conclusively determine how effectively U.S. export programs counter these foreign practices. However, two U.S. export programs—EEP and MAP—are no longer authorized only to counter specific competitor actions but rather have been broadened to assist U.S. agricultural exports in general. In addition, several economic studies (see footnote 79) indicate that foreign competitors find U.S. export subsidies relatively inexpensive to offset.
- Concerning U.S. trade negotiating objectives, there are widely divergent views about the amount of leverage these programs provided in the past. Looking to the future, some private and public officials say the programs could provide negotiating leverage for the 1999 World Trade Organization

(WTO)<sup>15</sup> agricultural talks, but others disagree and question their continued relevance for future negotiations.

Given the mixed evidence concerning the continued relevance of U.S. agricultural export assistance programs, their decreased funding levels, and the trend toward increased liberalization of global agricultural trade, the Congress may wish to reassess the continued viability and/or focus of the programs the next time these programs are reviewed.

## While FAIR May Modestly Increase U.S. Exports, International Factors Are More Important

Agricultural experts predict that FAIR's domestic policy reforms will likely help expand U.S. agricultural exports, though minimally. Other factors, such as expanding worldwide markets and the appeal of many U.S. agricultural products, are expected to increase U.S. exports independent of FAIR.

## FAIR May Modestly Increase U.S. Agricultural Exports

The extent to which FAIR's domestic policy reforms<sup>16</sup> may modestly increase exports is dependent on the degree to which farmers—who were previously constrained by pre-FAIR policies that restricted acreage and planting decisions—add additional land to production and use FAIR's planting flexibility to respond to international and domestic market conditions. For example, according to USDA, FAIR's elimination of the Acreage Reduction Program (ARP)—that set aside or allowed land to lie fallow—will permit more land to be available for cultivation and thus more crops for export. In addition, FAIR's suspension of the Farmer Owned Reserve Program (FOR) benefits the price competitiveness of U.S. agricultural exports by no longer limiting sales in times of large supply.<sup>17</sup>

FAIR's reforms are a continuation of the market-oriented reforms of domestic agricultural policy that have been underway since the 1985 and

<sup>15</sup>The Uruguay Round created the WTO on January 1, 1995, as a formal structure to replace the provisional GATT organizational structure. As of May 7, 1997, WTO had 131 member countries.

<sup>16</sup>FAIR in general decouples the link between planting decisions and income support. For example, FAIR production flexibility contract payments replace "deficiency payments," which were available under previous farm bills. Unlike the deficiency payments, which were made when the market price for a given government-supported crop fell below the USDA target price, production flexibility payments provide income support separate from a crop's market price or generally from farmers' planting decisions.

<sup>17</sup>See C. Edwin Young and Paul C. Westcott, The 1996 U.S. Farm Act Increases Market Orientation (Washington, D.C.: ERS, USDA, Aug. 1996).

1990 farm legislation.<sup>18</sup> These changes had already reduced the market-distorting impact of a complex system of government-established price supports. In addition, they diminished the government's holding of stocks, which had limited the private sector's ability to respond to changing market demand. For example, prior to the 1985 and 1990 farm legislation, the U.S. government held sizable stocks of grains, which made it a major player in the supply management of these commodities.

According to USDA, FAIR's changes<sup>19</sup> to domestic agricultural policy—such as the use of production flexibility payments, the elimination of ARP, and the suspension of FOR—increase the ability of farmers to choose which crops to plant and the amount of land to be cultivated while still allowing them to receive income support. Therefore, FAIR encourages farmers to react more quickly to market signals with regard to planting decisions and the amount of land to cultivate. Thus, FAIR should allow farmers to respond more rapidly to price changes in the international and domestic markets. Agricultural experts state that with this increased flexibility, farmers should be able to export more of their production, capitalizing on the considerable comparative advantages U.S. agriculture derives from substantial land resources, advanced transportation and information systems, and ongoing agricultural research.<sup>20</sup> For example, currently there is strong domestic and international demand for soybeans. Due to the flexibility FAIR provides, farmers have been able to respond to this increased demand by switching from planting other crops to cultivating soybeans. As a result, USDA states that 1997 soybean plantings are the highest since 1982.

In the past, farmers would have had more difficulty in quickly responding to this increase in demand. This is because prior to FAIR, in order to receive government deficiency payments, farmers had to contract with the U.S. government concerning the crops they would plant; this, in turn, locked them into certain crop cultivation patterns. However, also under FAIR, with increased production flexibility by farmers and reduced supply

<sup>18</sup>See the Food Security Act of 1985 (P.L. 99-198, Dec. 23, 1985) and the Food, Agriculture, Conservation, and Trade Act of 1990 (P.L. 101-624, Nov. 28, 1990).

<sup>19</sup>These changes to domestic agricultural policy affected bulk products more than high-value products (HVP), which have not been the primary recipient of most domestic support programs. HVPs represent a complex and diverse range of agricultural products. Some of these products are unprocessed and include fruits, nuts, and vegetables; semiprocessed and include flour, oilseed meals, and vegetable oils; or highly processed and include distilled beverages, meats, and other processed foods.

<sup>20</sup>Exports of U.S. wheat, corn, soybeans, and cotton are expected to modestly increase under FAIR. However, one exception to FAIR's anticipated modest increase in exports, according to ERS, is rice. Because of FAIR's elimination of planting requirements and other changes, U.S. rice production is down, domestic rice prices are up, and U.S. rice exports are down.

---

management by government, commodity price volatility is expected to increase. As a result, according to USDA, farmers face greater risk of income volatility, due to these fluctuations in commodity prices.

---

**Favorable International  
Market Conditions:  
Primary Reason U.S.  
Exports Are Expected to  
Increase**

Notwithstanding unforeseen negative weather conditions or political instability, future increases in U.S. agricultural exports are expected to be largely driven by changes in worldwide supply and demand as well as by the ongoing liberalization of global agricultural trade. According to USDA's baseline projections, between 1997 and 2005 U.S. agricultural exports will increase by 44 percent, from \$55.5 billion to \$79.7 billion.<sup>21</sup> This growth is expected to be largely due to (1) increased demand in East and Southeast Asian nations and in other regions and (2) market opening brought about by Uruguay Round agreements and associated reforms of other nations' agricultural programs. These changes in agricultural markets represent opportunities to U.S. agricultural competitors as well as to the United States. USDA baseline projections and other forecasts take into account how competitor nations respond to these opportunities.

Rising income levels in East and Southeast Asian nations, and in Latin America, the Middle East, and North Africa, are anticipated to result in improved diets and a greater demand for imports of grains, fruits, vegetables, and meat. China could play a key role in this increased demand for both bulk and high-value agricultural commodities, particularly as its urban middle class expands and incomes grow. Recent increases in U.S. agricultural exports have been largely driven by Asian demand, and agricultural forecasters say that this trend will likely continue. For example, agricultural researchers expect the following to occur:

- Between 1997 and 2005, East and Southeast Asian nations' gross domestic product (GDP) is expected to expand at a robust 7 percent per year, with China leading at about 8.5 percent, according to the USDA's ERS.<sup>22</sup> See figure 1 for a comparison of forecasted average East and Southeast Asian real GDP growth rates with other regions and country categories, 1990-2005.

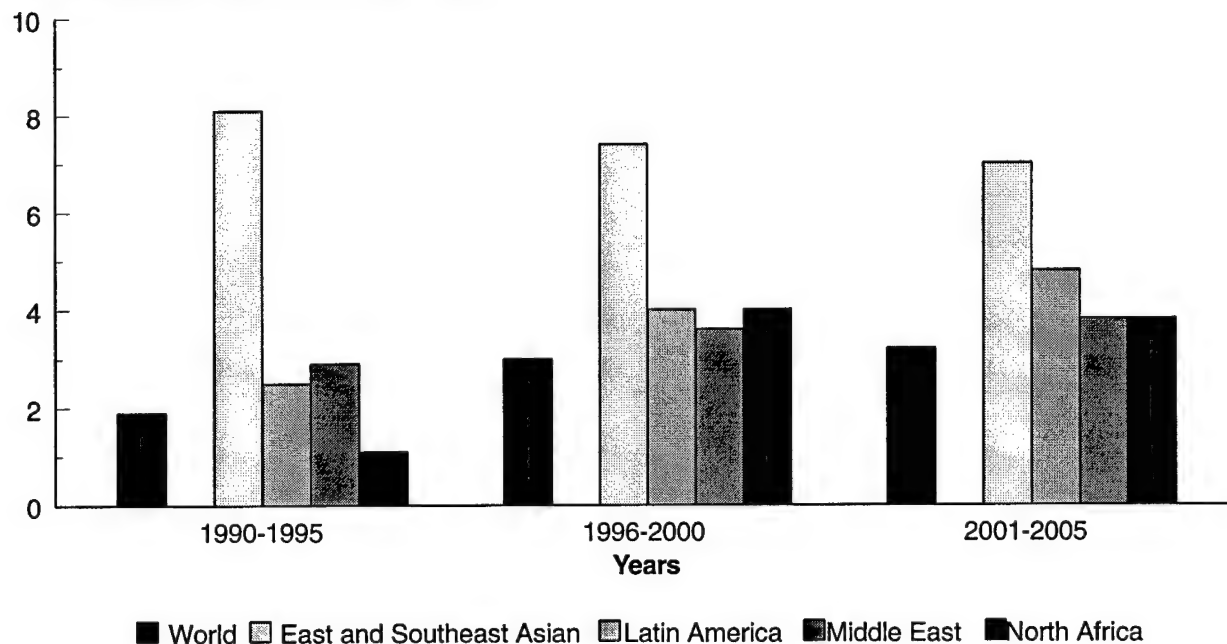
---

<sup>21</sup>See *Agricultural Baseline Projections to 2005, Reflecting the 1996 Farm Act*, USDA/Interagency Agricultural Projections Committee (Washington, D.C.: ERS, USDA, Feb. 1997).

<sup>22</sup>*Agricultural Baseline Projections to 2005*.

**Figure 1: Forecasted Average Annual Real GDP Growth Rates for Selected Regions, 1990-2005**

Average annual percent change in GDP



Source: Agricultural Baseline Projections to 2005.

- Between 1997 and 2005, strong growth in demand for feed grains and food products in the East and Southeast Asian nations—particularly in China—is predicted to fuel much of the growth expected in U.S. agricultural exports, according to the Food and Agricultural Policy Research Institute (FAPRI).<sup>23</sup>
- Demand for U.S. HVPS such as meat, fruits, vegetables, and prepared foods will rise, according to ERS. While most U.S. HVPS are exported to developed countries such as Canada, the EU, and Japan, these goods are increasingly flowing into the rapidly growing economies of East and Southeast Asia.

<sup>23</sup>FAPRI is an agricultural economic research organization that performs analysis for the Congress and other clients, on the potential impact of legislative changes on international trade in agriculture. See *FAPRI: 1996 U.S. Agricultural Outlook* (Ames, Iowa: Iowa State University, Aug. 1996).

Further influences expected to increase U.S. exports and global agricultural trade are (1) the market openings created by the Uruguay Round's agricultural provisions and (2) other related reforms in foreign countries' agricultural policies. The Uruguay Round agreements contain commitments by WTO members countries to open up—at least to some degree—their agricultural markets, many for the first time. Countries are doing so by reducing several important agricultural trade barriers, including import restrictions and tariffs, export subsidies, and domestic support programs. The Uruguay Round agreements also set forth rules on the use of sanitary and phytosanitary (SPS) measures that directly or indirectly affect international trade.<sup>24</sup> For example, SPS measures that restrict imports must generally be based on scientific principles. Several WTO members, including the United States, have invoked dispute settlement procedures regarding four SPS measures that appear to lack a scientific basis. These SPS rules are intended to make it more difficult for countries to rely on unjustified SPS measures as a way to protect their markets from imports. Other Uruguay Round provisions mandate conversion of most nontariff barriers (NTB), such as import licensing requirements, to tariffs. These measures were aimed at making trade barriers more transparent and thus facilitating world agricultural trade by encouraging a freer trade environment.<sup>25</sup>

In addition to Uruguay Round and bilateral trade liberalization (such as the U.S.-Japan beef and citrus agreement), unilateral policy changes have also significantly liberalized the world trading environment. Specifically, newly privatized markets are emerging from the collapse of the socialist economies in the former Soviet Union and Eastern Europe. Moreover, long-held policies of self-sufficiency, protectionism, and government control of markets are being challenged, reformed, or dismantled in Latin America, Asia, and Europe. For example, Argentina has gone a long way toward reforming its agricultural sector since the 1990s. These reforms include the privatizing of export facilities (thus reducing port handling costs) and the scrapping of major state-owned marketing boards for grains, meats, and sugar. While difficult to quantify, these unilateral policy changes in other nations are also expected to increase world agricultural trade, according to USDA.

<sup>24</sup>Sanitary measures pertain to human and animal health and safety. Phytosanitary measures pertain to protecting plants from pests and diseases.

<sup>25</sup>Uruguay Round-related increases in U.S. agricultural exports have been forecasted by USDA to be between \$4.7 billion and \$8.7 billion annually by the year 2005.

## Evidence Is Mixed Regarding the Continued Relevance of U.S. Export Assistance Programs

Overall, we found that the evidence is mixed regarding the continued relevance of U.S. agricultural export assistance programs. While FAIR's domestic policy reforms remove a primary benefit associated with most U.S. export assistance programs—the exporting of surplus stocks generated by domestic price supports—USDA and some industry officials state that these programs continue to have relevance. However, others disagree. To address this issue, we reviewed the evidence regarding the extent to which the programs

- benefit the overall U.S. economy,
- benefit the U.S. agricultural sector and specific U.S. commodities,
- counter competitor nations' agricultural export programs, and
- promote U.S. trade negotiating objectives.

One challenge in assessing these programs' continued relevance is that the evidence, for example, on whether they benefit the U.S. agricultural sector is limited largely to research on how these programs have functioned in the past and to the past experiences of program participants. Program performance under past conditions may not always be helpful in predicting future program contributions.<sup>26</sup> For example, EEP was created in the mid-1980s during a period of large grain stocks and low prices. According to ERS, the program is less effective under changed market conditions of higher world prices and tighter stocks. Another challenge is the difficulty in generalizing across these export programs regarding their continued relevance, as they each have multiple objectives and support various commodities and export markets. Nevertheless, we identified applicable economic research and principles as well as expert opinion that provide an indication of the future contributions of these programs in the four key areas previously outlined.

## No Conclusive Evidence That USDA Export Programs Measurably Benefit the Overall U.S. Economy

Program proponents, including many industry groups and USDA, say that the United States receives macroeconomic<sup>27</sup> benefits from export assistance programs. Program proponents state that agricultural export assistance programs expand total U.S. output and employment through additional exports, reduce the size of the U.S. trade and federal budget deficits, and contribute to overall economic efficiency. Some USDA officials

<sup>26</sup>In addition, there is uncertainty regarding future agricultural legislation, as FAIR is authorized through 2002. Subsequent farm legislation could alter the potential future contributions of U.S. agricultural export assistance programs.

<sup>27</sup>Macroeconomics refers to the performance of the economy as a whole, including the general levels of output and income, rather than the performance of individual sectors.

state that these programs were not necessarily intended to provide macroeconomic benefits, but rather they are to redistribute resources to the rural economy. However, a 1995 USDA study concluded that MAP has macroeconomic benefits because it increases the level of overall economic activity and employment through expanded U.S. exports. The study states that this expansion of new economic activity and employment is sufficient for MAP to more than fully pay for itself through increased tax revenue, thus contributing to reducing the budget deficit.<sup>28</sup>

Our analysis and review of economic studies, however, found no conclusive evidence that these programs have provided net benefits to the aggregate economy.<sup>29</sup> Government export programs largely reallocate production, employment, and income among sectors. The potential for export programs to affect overall U.S. output, employment, and the trade and budget balances is limited to particular circumstances, such as in cases where markets do not operate efficiently. Moreover, economic research suggests that the federal government's ability to influence short-run U.S. output and employment levels comes primarily through making changes in either fiscal policy, such as overall levels of government expenditures and taxation, or Federal Reserve monetary policy.<sup>30</sup>

#### Effect on Output, Employment, and Budget Deficits

Government export subsidy, promotion, and loan guarantee programs largely reallocate production, employment, and income between sectors, a reallocation that occurs when an economy is near or at full employment, but some of these reallocations may also occur when resources are unemployed.<sup>31</sup> In general, subsidizing one sector is the equivalent of taxing

<sup>28</sup>For USDA views on MAP's impact, see *Evaluating the Effectiveness of the Market Promotion Program on U.S. High-Value Agricultural Exports*, Foreign Agricultural Service Staff Paper 1-95 (Washington, D.C.: USDA, Feb. 1995).

<sup>29</sup>This conclusion is based on conventional mainstream economic perspectives. Some economists and research organizations disagree with these mainstream views.

<sup>30</sup>For a discussion, see Herbert Stein, *Presidential Economics: The Making of Economic Policy from Roosevelt to Reagan and Beyond*, 2nd rev. ed. (Washington, D.C.: American Enterprise Institute for Public Policy Research, 1988) and Charles L. Schultze, *Memos to the President: A Guide Through Macroeconomics for the Busy Policymaker* (Washington, D.C.: The Brookings Institution, 1992). Changes in the composition of government spending may have output effects. For example, within a given fiscal policy, shifting from spending for current purposes to spending for well-chosen public investments can play an important role in increasing private sector output and economic growth. See *Federal Budget: Choosing Public Investment Programs* (GAO/AIMD-93-25, July 23, 1993).

<sup>31</sup>*Macroeconomic Consequences of Farm Support Policies*, Andrew B. Stoeckel, David Vincent, and Sandy Cuthbertson, eds. (Durham, NC: Duke University Press, 1989).

other sectors.<sup>32</sup> Export subsidies can raise prices for domestic consumption, change the cost of domestic resources and the composition of resource usage, alter the composition of trade, and may sometimes change the level of total trade. Government support for a specific sector generally implies reduced government spending in other areas. Agricultural export assistance may also change the location of economic activity, sustaining rural economic activity that would not occur in its absence. Because these programs potentially reallocate resources, changes in these programs, including reductions in funding or elimination, may result in employment and business dislocation if the subsidized sector contracts.

With respect to the argument that export programs can stimulate the economy and raise output and employment, changes in government fiscal policy may accomplish this in the short term, if the economy is operating at less than full employment.<sup>33</sup> These policy changes have historically included tax cuts or increased deficit-financed government spending such as on employment or infrastructure programs.<sup>34</sup> Even when agricultural resources are underemployed, if the government chooses to promote exports to foreign consumers rather than to increase domestic spending, U.S. producers may divert some of their output from the domestic to the foreign market.<sup>35</sup> This could, however, raise domestic prices, thus making domestic consumers worse off. Even if the government could stimulate overall demand by supporting export assistance programs, an increase in output and employment would still not be assured, as the Federal Reserve

<sup>32</sup>See discussion by Gene M. Grossman, "Strategic Export Promotion: A Critique," in *Strategic Trade Policy and the New International Economics*, Paul R. Krugman, ed. (Cambridge, MA: The MIT Press, 1986).

<sup>33</sup>Recently, the macroeconomic principle that larger budget deficits can increase output in the short run has been challenged, though not yet supplanted. Some recent economic policy experience suggests that contractionary fiscal policies may be expansionary, even in the short run, because they can lower the long-term real interest rate. See Alan S. Blinder, "Is There a Core of Practical Macroeconomics That We Should All Believe?" and Oliver Blanchard, "Is There a Core of Usable Macroeconomics?" in *American Economic Review* (May 1997).

<sup>34</sup>While the funding of export programs does not increase during periods of unemployment, USDA officials note that they do account for economic conditions in their administration of the programs. For example, according to USDA, during periods of high commodity prices and full deployment of agricultural resources, EEP is not utilized. See discussion of the limitations of fiscal policy in Schultze, *Memos to the President*.

<sup>35</sup>The ability of U.S. export promotion programs to create additional exports of a subsidized commodity is controversial. Only if new export demand is met with new production would there be no diversion from the domestic market.

could choose to offset any expansion that it views as inflationary by raising interest rates.<sup>36</sup>

Because export programs are unlikely to expand the overall economy when it is at or near full employment, they cannot generally increase tax revenues or lower budget deficits. We, and others, have concluded that a major reduction in the budget deficit would yield long-term macroeconomic benefits for the U.S. economy.<sup>37</sup> Any program analysis that assumes that the resources involved in a U.S. government export program would otherwise be unemployed may show employment expansion and hence tax revenue gains. For example, USDA's 1995 MAP study<sup>38</sup> claims such impacts, by assuming the resources would otherwise be unemployed. This assumption leads to a conclusion that the program has resulted in increased tax revenues. This methodology does not comply with Office of Management and Budget cost-benefit guidance, which instructs agencies to treat resources as if they were likely to be fully employed.<sup>39</sup>

If export promotion programs impact economic efficiency, they can potentially affect output, employment, and tax receipts over the longer run. In principle, the right kind of government intervention may improve economic efficiency if "market failures" exist. Examples of market failures include cases where costs and benefits are not "internalized" by firms and consumers, market participants have asymmetric information, or a market

<sup>36</sup>Currently, members of the Federal Reserve Board are closely monitoring U.S. labor market conditions to evaluate whether the United States is approaching the maximum rate of noninflationary employment growth. Additionally, even if aggregate demand expansion does lead to short-run gains in output and employment, long-term budget deficits can lower national saving and investment, thereby reducing long-term output and employment prospects. See Schultze, Memos to the President.

<sup>37</sup>These benefits include higher national saving, higher investment, more rapid economic growth, and a lower foreign debt. The idea that contractionary fiscal policies of deficit reduction may in fact be expansionary is becoming part of the conventional policy wisdom, although with limited empirical evidence (see Blinder, "Is There a Core of Practical Macroeconomics"). For our analysis, see The Deficit and the Economy: An Update of Long-Term Simulations (GAO/AIMD/OCE-95-119, Apr. 26, 1995) and Budget Policy: Prompt Action Necessary to Avert Long-Term Damage to the Economy (GAO/OCG-92-2, June 5, 1992). The long-term benefits of fiscal policy changes are difficult to appreciate, particularly compared with the steep short-term costs necessary to achieve significant deficit reduction. To clarify the consequences of significant change in fiscal policy, we adapted the long-term economic growth model developed by economists at the Federal Reserve Bank of New York. The assumptions incorporated in this model are relatively conservative with regard to the relationship between capital investment and growth in national output.

<sup>38</sup>Evaluating the Effectiveness of the Market Promotion Program.

<sup>39</sup>See "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs, OMB Circular No. A-94, sec. 6b(3) (Oct. 29, 1992)." OMB's approach has also been adopted by the interagency Trade Promotion Coordinating Committee for constructing performance measures that parallels work that trade agencies are undertaking under the Government Performance and Results Act of 1993 (P.L. 103-62, Aug. 3, 1993).

participant has market or monopoly power. For instance, some economists have argued that a targeted government industrial policy of trade promotion (or protection) could increase national income. The cases are quite specific, however, and apply to industries with "external" economies that involve the spillover of knowledge between firms or economies of scale. While these intervention benefits have been recognized in principle, economists are generally cautious about their policy usefulness and application. Typically, these rationales have been associated with high-tech industries such as aircraft and semiconductors, not with food processing or agriculture.<sup>40</sup>

Increasingly, USDA argues that the export assistance programs can address market failures in agricultural or credit markets but acknowledges it is difficult to quantify this in most cases. ERS reports that, while claims of market failure must be carefully scrutinized, agricultural commodity market failures could include poorly developed credit markets in developing countries or the lack of broadly available information on a new or emerging market. There is no assurance, however, that export subsidy, promotion, or guarantee programs correct these failures. On the other hand, if government intervention creates distortions that reduce efficiency, then output, employment, and tax revenue may fall. In summary, we found no evidence that the export assistance programs enhanced economic efficiency.

USDA is conducting an assessment of export program impacts at the direction of the Trade Promotion Coordinating Committee (TPCC).<sup>41</sup> USDA reports that the results will show that U.S. agricultural export assistance programs benefit national welfare by addressing market failures, but USDA and OMB declined to share their current draft report with us. Earlier we had received an ERS briefing on the preliminary estimates of these

<sup>40</sup>See the discussion of market failures in our May 1996 testimony, Export Promotion: Rationales for and Against Government Programs and Expenditures (GAO/T-GGD-95-169, May 23, 1995). Also, see discussion in J. Bhagwati, The World Trading System at Risk (Princeton, NJ: Princeton University Press, 1991); articles in Strategic Trade Policy and the New International Economics, Paul R. Krugman, ed. (Cambridge, MA: The MIT Press, 1986); Paul R. Krugman, Pop Internationalism (Cambridge, MA: The MIT Press, 1996); and Laura D'Andrea Tyson, Who's Bashing Whom?: Trade Conflict in High-Technology Industries (Washington, D.C.: Institute for International Economics, Nov. 1992).

<sup>41</sup>In an effort to coordinate and develop a U.S. trade strategy, TPCC has directed USDA to assess the impact of U.S. agricultural export assistance programs. An issuance date for the final TPCC report has not been set.

programs' impacts.<sup>42</sup> USDA officials state that the final TPCC report will show different conclusions concerning program impact than the preliminary estimates.

## Effect on Trade Deficit

Most research by economists has concluded that the overall U.S. trade balance is determined largely by U.S. macroeconomic conditions such as the amount of domestic savings and investment, exchange rates, and the size of the government budget deficit, not by trade policy.<sup>43</sup> No conclusive evidence exists to support the assertion that U.S. agricultural export assistance programs influence the size of the U.S. trade deficit. When the United States is spending more on goods and services than its total income, the nation is borrowing from the rest of the world. This net borrowing, or current account deficit, is equal to the government budget deficit plus the difference between private sector investment and savings.<sup>44</sup> According to the President's Council of Economic Advisers, the government can contribute to reducing the current account and trade deficits through macroeconomic policy measures such as eliminating the federal budget deficit. These policy measures can narrow the gap between U.S. savings and U.S. investment. However, U.S. trade policies may not change the overall trade balance, but they can alter the composition and the overall levels of U.S. trade. For example, increases in agricultural exports could lead to a reduction in some other export or to increased imports. Thus, successful export promotion can benefit the targeted product but at the expense of nontargeted exports or import-competing domestic producers.

<sup>42</sup>Economic Impact of U.S. Agricultural Trade Programs and Policies (Commercial Agricultural Division, ERS, undated briefing slides). ERS is undertaking the USDA program assessment using three different modeling efforts. These include a multicountry partial equilibrium model of world grain, oilseed, and livestock markets; a computable general equilibrium (CGE) model of the U.S. economy; and an input-output multiplier model to estimate program employment and income impacts. We recognize that isolating the impact of program spending is very difficult empirically. In *North American Free Trade Agreement: Assessment of Major Issues, Volume 2* (GAO/GGD-93-137, Sept. 9, 1993), we reported on the strengths and limitations of the CGE methodology. In *Agricultural Trade: Significance of High-Value Products as Agricultural Exports* (GAO/GGD-93-120, Aug. 10, 1993), we reported that input-output multiplier models should not be used to predict the impact of government export assistance programs.

<sup>43</sup>See discussion of research in *International Trade: The U.S. Trade Deficit; Causes and Policy Options for Solutions* (GAO/NSIAD-87-135, Apr. 28, 1987) and *International Trade: Symposium on the Causes of the U.S. Trade Deficit* (GAO/NSIAD-87-135S, May 15, 1987). Similar views are held by the President's Council of Economic Advisers. See the *Economic Report of the President* (Washington, D.C.: Government Printing Office [GPO], Feb. 1996) for a detailed discussion of the causes of the trade deficit and its relation to trade policy.

<sup>44</sup>See Rudiger Dornbusch, *Open Economy Macroeconomics* (New York, NY: Basic Books, 1980). Also see discussion in *Competitiveness Issues: The Business Environment in the United States, Japan, and Germany* (GAO/GGD-93-124, Aug. 9, 1993).

## U.S. Export Programs Have Provided Small Global Increases in U.S. Agricultural Exports

USDA officials and others state that U.S. agricultural export assistance programs increase the exports of specific U.S. commodities and overall farm sector income and employment. However, we found few studies that support the position that these programs increase farm income and employment for the sector as a whole.<sup>45</sup> Regarding U.S. exports, we found that there have been some instances of increased exports to specific markets from commodities supported by these programs, but the additional exports that these programs have provided worldwide have been relatively small. An adverse effect of these programs has been that at times they have also caused a small decrease in exports of other competing, unassisted, U.S. commodities.

It must be noted that it is difficult to assess these programs' impact on the U.S. agricultural sector. This is because (1) past evaluations of these programs have narrowly focused on an individual U.S. export program, commodity, or foreign market and not on the overall impact of these programs on the agricultural sector as a whole; and (2) these programs' impact on U.S. agricultural exports worldwide cannot be easily isolated from other policies and economic conditions that help increase U.S. agricultural exports. The latter includes lower U.S. interest rates, other U.S. government assistance, depreciation of the U.S. dollar against competitors' currencies, agricultural commodity production shortfalls in major markets overseas, the liberalization in agricultural markets brought about by the Uruguay Round, and the growing trend in agricultural market reforms around the world.

## Export Assistance Programs Have Increased U.S. Agricultural Exports to Targeted Markets but Have Had Limited Impact Globally

USDA officials and others state that U.S. agricultural export assistance programs have resulted in exports above and beyond what would have occurred without the programs. However, demonstrating that additional exports result from these programs is difficult to prove because of the myriad factors that affect import decisions. We found evidence that U.S. export programs have resulted in some increased U.S. agricultural exports to targeted, specific markets, but the additional exports that these programs have provided worldwide have been relatively small. Another effect of these programs, according to some private officials, has been that, at times, they have also caused a small decrease in exports of competing, unassisted, U.S. commodities.

<sup>45</sup>As mentioned previously, in March 1996 we received an ERS briefing with preliminary estimates regarding U.S. agricultural export assistance programs' impact on farm income and employment. ERS officials requested that we not use these estimates in our report because they were preliminary and had not been cleared by USDA.

EEP: Regarding EEP, prior studies<sup>46</sup> have concluded that only a portion of EEP-supported wheat exports were exports above and beyond the level that would have occurred without the subsidy. The estimates of the value of U.S. wheat exports resulting from every dollar of EEP assistance (1986-88) ranged from 2 to 30 cents of additional wheat exports, depending on the assumptions made about global export market conditions and other variables. More recently, FAPRI estimates that if EEP is utilized, the value of additional U.S. wheat exports resulting from every dollar of EEP assistance (1997-2004) would range from 10 to 15 cents. ERS reports that its estimates of EEP's trade impact depend on market conditions and the program's scope (that is, how many foreign markets it is operating in) but states that the program becomes less effective under conditions when food stocks are tight and world prices are high. Such conditions existed during 1996, and the program was not used. And ERS forecasts that tight market conditions are likely to continue through 2005.

Research has shown that EEP can increase wheat exports to specific targeted markets.<sup>47</sup> Increased EEP wheat exports to the Soviet Union and China are often cited by USDA as examples of the program's effectiveness in bolstering U.S. exports. For instance, in January 1987, China was offered wheat for the first time under EEP. Sales increased from less than 1 million metric tons in 1985 to about 7.2 million metric tons in 1988. As of May 1990, China had bought over 15 million metric tons of wheat, making it the second largest wheat importer under the program, after the Soviet Union. However, while EEP has increased U.S. exports to individual markets, it has not historically increased U.S. world market share, particularly for bulk commodities where the United States is a leading world exporter. For example, with wheat—where the United States is the largest exporter—EEP has not significantly increased U.S. export market share but rather has only lowered the price available to foreign consumers.

The primary reason cited by agricultural trade researchers for the relatively small additional U.S. exports that these programs—particularly EEP and GSM-102—provide worldwide is that U.S. export programs' increased exports to specific markets are often offset by lost U.S. sales in

<sup>46</sup>See, for example, A.H. Seitzinger and Philip Paarlberg, *The Export Enhancement Program: How Has it Affected Wheat Exports?* ERS, USDA (Washington, D.C.: GPO, 1989). Also, K.W. Bailey, *Why Did U.S. Wheat Exports Expand?* ABI No. 564, ERS, USDA (Washington, D.C.: May 1989); and *International Trade: Export Enhancement Program's Recent Changes and Future Role* (GAO/NSIAD-90-204, June 14, 1990).

<sup>47</sup>See Stephen L. Haley, "The U.S. Export Enhancement Program: Prospects under the Food, Agriculture, Conservation, and Trade Act of 1990," *Food Policy* (Apr. 1992).

other nonassisted markets. Specifically, competing suppliers may respond to U.S. competition in countries that benefit from GSM-102 or EEP by concentrating their efforts in other countries and displacing potential U.S. sales in these other countries. Thus, while U.S. exports may increase in particular markets targeted by U.S. export programs, the overall effect on U.S. exports worldwide is small. If displacement occurs, the programs may merely reroute trade flows and do not necessarily increase U.S. agricultural exports.

Some studies have found,<sup>48</sup> and industry officials have argued, that EEP at times has done more to displace unassisted U.S. agricultural exports than it has to promote U.S. agricultural exports in general. Specifically, industry officials state that the concentration of EEP on wheat exports has at times had the effect of reducing the market opportunities of other commodities such as corn and soybeans that are broad substitutes for wheat in use and production.<sup>49</sup> But since the impact of EEP globally is not dramatic, the displacement effect is also limited.

Another concern expressed by some industry officials about EEP is that in countries where soil and growing conditions allow flexible production of commodities, reduced prices due to EEP wheat exports can induce increased production of alternate crops to wheat (such as corn, canola, and soybeans). This can, in turn, reduce the competitive position of U.S. producers of these alternate crops.<sup>50</sup>

<sup>48</sup>See Stephen L. Haley, "The U.S. Export Enhancement Program Over 1991-95 Crop Years" Report No. 690 (Baton Rouge, LA: Louisiana State University, Dec. 1991). Robert L. Paarlberg, "The Mysterious Popularity of EEP," *Choices* (second quarter 1990); and Haley, "The U.S. Export Enhancement Program: Prospects."

<sup>49</sup>One displacement example, provided by a major U.S. exporter, involves the impact of EEP-subsidized wheat to China (it should be noted that while this is an accurate description of displacement, it was a onetime occurrence in China). In 1994, EEP-subsidized wheat was sold to China. This high-quality wheat was used in Chinese mills for flour production, freeing up lower quality Chinese wheat as feed grain for China's poultry industry. Since the poultry industry had an adequate supply of feed grain, Chinese corn normally used as feed grain by the industry was instead exported to South Korea, which is traditionally an export market for U.S. corn. In addition, some Chinese poultry was then exported to Hong Kong, where it was in direct competition with U.S. poultry sold there. Thus, EEP-subsidized wheat exports to China helped displace U.S. sales of corn to both China and South Korea and provided increased competition for U.S. poultry sales to Hong Kong.

<sup>50</sup>One U.S. oilseed exporter reported that it has lost export sales to subsidized EEP wheat sales. It stated that in the late 1980s, because of the EU/U.S. subsidy war over exported wheat, South American countries (particularly Argentina) shifted their concentration from wheat production to oilseed production. Therefore, as a result of the subsidy war in wheat, the United States bought itself increased competition for oilseeds from South America.

MAP: Regarding MAP, USDA officials report that program spending has resulted in additional agricultural exports.<sup>51</sup> They identified numerous studies that conclude that in most cases, MAP subsidies increase U.S. sales of a commodity in a targeted market. For example, one study found that each dollar of MAP funds to promote apples in Singapore and the United Kingdom resulted in over \$20 of additional apple exports.<sup>52</sup> Another study explored the long-term impact of in-shell walnut promotion in Japan and found that a dollar of MAP promotion would, over 40 years, increase U.S. walnut exports by \$5.30.<sup>53</sup> Worldwide walnut promotion was evaluated in another study, which found that while each dollar spent on MAP promotion increased walnut exports by \$1.42 over the long-run, it actually reduced the exports of eight other horticultural exports by \$3.57 (thus reducing U.S. agricultural exports worldwide by \$2.15).<sup>54</sup>

In some instances, studies of MAP's impact on specific commodities reach different conclusions. For example, a study of exports of U.S. meat products to Japan concluded that USDA market promotion from 1973-91 only resulted in a statistically significant increase in U.S. market share for beef offals<sup>55</sup> but not for beef or pork meat.<sup>56</sup> A second study of Japan's meat markets, using a different methodology and time period (1973-94), concluded that USDA-funded beef advertising and promotion expenditures had a significant positive influence on Japanese demand for U.S. beef but could not demonstrate that U.S. pork or poultry advertising and promotion expenditures had any effect on the demand for U.S. pork or poultry

<sup>51</sup>See Evaluating the Effectiveness of the Market Promotion Program on U.S. High-Value Agricultural Exports, USDA, FAS Staff Paper 1-95 (Feb. 1995).

<sup>52</sup>Timothy J. Richards, et al., "A Two-Stage Analysis of the Effectiveness of Promotion Programs for U.S. Apples," Agricultural Commodity Promotion Policies and Programs in the Global Agri-Food System (Proceedings from the Research Committee on Commodity Promotion [NEC-63] Conference, Cancun, Mexico, May 26-27, 1996).

<sup>53</sup>Kenneth R. Weiss, et al. "Walnuts in Japan: A Case Study of Generic Promotion under the USDA's Market Promotion Program," Agricultural Commodity Promotion Policies and Programs in the Global Agri-Food System (Proceedings from the Research Committee on Commodity Promotion [NEC-63] Conference, Cancun, Mexico, May 26-27, 1996).

<sup>54</sup>"Market Access Program Evaluation: Fruits and Vegetables," National Food and Agricultural Policy Project Policy Paper Series, NFAPP #97-2 (Tempe, Arizona: Arizona State University, Apr. 1997).

<sup>55</sup>Beef offals are the byproducts of butchered beef such as the heart, liver, and intestines. The Japanese category for beef offal imports also includes diaphragm or "skirt" beef.

<sup>56</sup>See Shida Rastegari Henneberry and Marco De Brito, "An Analysis of the Effectiveness of U.S. Non-Price Promotion Programs: The Case of Red Meats in Japan," in Promotion in the Marketing Mix: What Works, Where and Why, study presented at a USDA cosponsored conference, Regional Research Committee on Commodity Promotion (Toronto, Canada: Apr. 28-29, 1994). The study applied annual data for the 1973 through 1991 period for beef, and 1973 through 1988 for beef offals and red meats. Between 1984 and 1991, USDA meat promotion in Japan amounted to \$54 million (in 1996 dollars). According to FAS, MAP data for the period 1973-84 are no longer available.

products.<sup>57</sup> These inconsistent results for beef demonstrate the problem of verifying whether U.S. export promotion programs expand exports. Similarly, another study found that while almond exports increased in Japan, Taiwan, and Hong Kong due to MAP spending, MAP subsidies for almonds had no significant effect on exports in South Korea and Singapore.<sup>58</sup>

The studies evaluating various MAP projects provide limited information for assessing the program. While the studies do present many cases where government-funded advertising may have increased U.S. exports to targeted markets, they fail to show that MAP expenditures were above and beyond private sector promotion that might have occurred in the absence of MAP. Most of the studies describe the exports resulting from promotion as the "returns" for the subsidy, but these studies fail to deduct any of the costs involved in the production or distribution of the additional commodity being exported.<sup>59</sup> One study noted that this approach assumes the cost of producing and exporting an additional unit of output is zero and that thus, the calculated returns are "gross" returns and not "net" returns to investment.<sup>60</sup> Additional cost information is required to determine whether a specific MAP promotion effort results in a net return to investment for the private or public sectors. Further, the MAP studies generally exclude factors that could permit program administrators to assure a positive net impact from MAP expenditures. These factors include the levels of private expenditures for promotion, government promotion by competitor nations, changes in domestic and foreign supply conditions, and trade liberalization brought about by reductions in tariffs and other trade barriers. Evaluations of MAP projects that ignore increased trade liberalization may overestimate MAP's contribution to increased U.S. exports. Moreover, little of the research considers whether an increase in producers' profits due to MAP-supported exports is sustainable, since producers may increase supply and thus reduce long-term profits. Nor does the research make an assessment of MAP's benefits and costs to U.S. taxpayers, including the impact of increased exports on U.S. domestic

<sup>57</sup>Allison Comeau, Ron C. Mittelhammer, and Thomas I. Wahl, "Assessing the Effectiveness of MPP Meat Advertising and Promotion in the Japanese Market," National Institute for Commodity Promotion Research & Evaluation, NICPRE 96-10 R.B. 96-20 (Ithaca, NY: Cornell University, Dec. 1996).

<sup>58</sup>Karen Halliburton and Shida Rastegari Henneberry, "The Effectiveness of U.S. Nonprice Promotion of Almonds in the Pacific Rim," *Journal of Agricultural and Resource Economics* (July 1995).

<sup>59</sup>Including these costs would reduce the "returns" reported to MAP.

<sup>60</sup>See footnote 58.

prices.<sup>61</sup> Lastly, the available studies do not assess whether MAP expenditures are justified due to a market failure or what the appropriate government responsibility is regarding export promotion.

**Title I:** Concerning title I food aid,<sup>62</sup> the assistance it provides can in theory contribute to market development if the program creates preferences for U.S. products that remain after the concessional sales have been discontinued and, thus, can result in a greater U.S. share of a given country's commercial market (that is, increased U.S. exports). However, it is difficult to develop product loyalty and secure commercial market share when title I commodities, which are typically bulk and semiprocessed agricultural goods, can easily be replaced by or substituted with products from other nations. In the short term, title I allows the United States to move commodities and possibly keep a market presence that it otherwise might not have been able to maintain. However, historically, the concessional sales made possible by title I do not necessarily translate in the long term into increased commercial market share or additional exports.

#### Limited Evidence Exists That U.S. Export Programs Impact Agricultural Sector Overall Income or Employment

We found few studies that support the position that U.S. agricultural export assistance programs increase income or employment for the farm sector as a whole. The ability of export programs to affect U.S. agricultural sector income and employment is constrained by the limited and selective nature of these programs. That is, export programs only affect a small portion of U.S. agricultural exports. For example, the U.S. government spent approximately \$792 million on these programs in fiscal year 1996,<sup>63</sup> while U.S. agricultural exports for the same period were \$60 billion. In addition, 80 percent of U.S. agricultural exports, between fiscal year 1989 and 1993, received no government assistance.

<sup>61</sup>Some of these points are made by Karen Z. Ackerman and Shida Rastegari Henneberry in "Economic Impacts of Export Market Promotion," *Commodity Promotion Policy in a Global Economy* (Arlington, VA: Proceedings of a Symposium, Oct. 22-3, 1992).

<sup>62</sup>See *Food Aid: Competing Goals and Requirements Hinder Title I Program Results* (GAO/IGD-95-68, June 26, 1995). Our report states that title I has five objectives: (1) to combat world hunger and malnutrition and their causes; (2) to promote sustainable economic development, including agricultural development; (3) to expand international trade; (4) to develop and expand export markets for U.S. agricultural commodities; and (5) to encourage the growth of private enterprise and democratic participation in developing countries. Regarding market development, our report found that title I's importance in helping develop long-term U.S. agricultural markets has not been demonstrated.

<sup>63</sup>The importance of title I as an export assistance program, for example, has declined significantly since the program's inception in 1954. Today, title I represents less than 1 percent of the total value of U.S. agricultural exports, whereas the program represented about 19 percent in the late 1950s and mid-1960s.

These export programs focus primarily on bulk commodities, rather than HVPS, which represent the largest segment of forecasted increases in world agricultural trade. Thus, some components of the sector, such as bulk commodity producers, may receive some income and employment benefits. USDA believes that if these programs were reduced or eliminated, some bulk commodity producers—particularly wheat farmers—would most likely experience some diminished income and employment as a result. For example, an ERS study estimated that if EEP expenditures of \$938 million were eliminated in 1993, the U.S. grain sector would lose \$538 million in income and 3,100 jobs. The analysis found that eliminating EEP would also have increased overall domestic welfare (including benefits to both producers and consumers) by \$325 million and did so under all market conditions analyzed. Moreover, the study stated that export subsidies amount to an income transfer from U.S. households to producers and lead to a decline in domestic welfare.<sup>64</sup>

One reason U.S. agricultural export assistance programs' impact on farmers' income is limited is because some farmers derive a majority of their income from employment off the farm. And this off-farm employment is increasingly determined by national economic growth rates and nonfarm employment opportunities. According to USDA data, over 85 percent of farm household income comes from off-farm employment and income.<sup>65</sup> While there are currently about 2.1 million farms in the United States, USDA classifies only about 550,000 as commercial farms.<sup>66</sup> And it is these farms that are most affected by U.S. agricultural export assistance programs. Some studies have concluded that using U.S. agricultural export programs to transfer income to the agricultural sector is not the most cost-effective method for doing so.<sup>67</sup> In 1994, we reported that the income of wheat farmers would have increased about 21 percent more if additional federal dollars had been spent on higher commodity target prices rather than on EEP.<sup>68</sup>

<sup>64</sup>See Kenneth Hanson, Stephen Vogel, and Sherman Robinson, Sectoral and Economywide Impacts of Eliminating the Export Enhancement Program, ERS (Washington, D.C.: Nov. 1995).

<sup>65</sup>See Structural and Financial Characteristics of U.S. Farms, 1993, ERS (Washington D.C.: Oct. 1996).

<sup>66</sup>USDA defines "commercial farms" as those farms whose level of gross sales is at least \$50,000. Commercial farms range in size from small (gross sales at or above \$50,000), to super large (gross sales at or above \$1 million). About 90 percent of commercial farm operators report that farming is their major occupation.

<sup>67</sup>See T.W. Hertel, R.L. Thompson, and M.E. Tsigas, "Economy-wide Effects of Unilateral Trade and Policy Liberalization in U.S. Agriculture," in Macroeconomic Consequences of Farm Support Policies; and K. Hanson, et al., Sectoral and Economywide Impacts.

<sup>68</sup>See Wheat Support: The Impact of Target Prices Versus Export Subsidies (GAO/RCED-94-79, June 7, 1994).

## Uncertainty Exists Whether U.S. Export Programs Counter Competitor Nations' Programs

Some U.S. government officials and private sector representatives state that U.S. agricultural export assistance programs are valuable because they counter competitor nations' export programs and thus "level the playing field" between our exporters and competitor exporters who benefit from their own nation's programs. USDA officials argue that U.S. programs (1) protect the income of the agricultural sector from the impact of foreign export subsidies, (2) level the playing field by helping U.S. companies compete against specific foreign competitors' subsidized sales and other export assistance, and (3) increase the cost of foreign competitors' agricultural subsidies to their governments. We found that because of the lack of transparency in other competitor nations' export assistance efforts, it is difficult to verify how effectively U.S. export programs counter these foreign practices. We also observed that some U.S. export programs are no longer used only to counter specific competitor actions but rather have been broadened to assist U.S. agricultural exports in general. In addition, several economic studies indicate that our competitors find U.S. export subsidies relatively inexpensive to offset.

USDA states that EEP has provided some income protection to the U.S. agricultural sector from foreign export subsidies. Specifically, because foreign nations subsidize their sales, subsidies such as EEP provide an income transfer to U.S. farmers that protects them from absorbing the lower world sales price. Under previous farm legislation, deficiency payments to farmers insulated farmers' income from decreases in U.S. domestic market prices. So EEP had a limited impact on the income of farmers participating in U.S. domestic commodity support programs. For farmers not participating in these commodity support programs, however, a slightly higher domestic price due to modest increases in export demand for some EEP-supported U.S. commodities may have countered the income reduction due to foreign export subsidies.

We could not identify convincing evidence on the degree to which U.S. export programs have effectively matched U.S. competitors' agricultural export programs and, thus, have leveled the playing field. By program design, GSM and title I are not specifically used to counter competitor nations' efforts to assist exports. With respect to EEP and MAP, the evidence is inconclusive. This is due in part to changes in U.S. laws governing these programs and to limited data on foreign governments' and private entities' export assistance activities. For example, EEP previously was intended to discourage unfair trade practices<sup>69</sup> such as competitor nations' use of

<sup>69</sup>See Food, Agriculture, Conservation and Trade Act of 1990 (P.L. 101-624, sec. 1531, Nov. 28, 1990).

agricultural export subsidies. However, U.S. implementing legislation for the Uruguay Round agreements<sup>70</sup> states that the program's use is not limited solely to countering unfair trade practices. MAP was previously required to counter unfair trade practices, such as the use of subsidies,<sup>71</sup> but U.S. implementing legislation for the Uruguay Round agreements removed this requirement.<sup>72</sup> According to USDA officials, though changed in law, operationally EEP is still used largely to counter unfair trade practices.

USDA reports that U.S. competitors are willing to incur large expenses to support their agricultural exports and, thus, reasons that to remain competitive and to protect the incomes of U.S. producers, the United States must do likewise. According to USDA, the EU in fiscal year 1996 spent about \$9 billion on export subsidies.<sup>73</sup> Agricultural exporting nations, such as Australia, Canada, and New Zealand, provide less government support for export assistance.<sup>74</sup> However, they sell some of their agricultural exports, including wheat and dairy products,<sup>75</sup> through state trading enterprises (STE).<sup>76</sup> Some USDA and private sector officials believe that STEs give these countries advantages over U.S. exporters because of their ability to charge nontransparent and different prices in different markets.<sup>77</sup> Thus, they state that U.S. programs are needed to offset foreign government subsidies, these marketing organizations, and other competitor nations' actions.<sup>78</sup> With the lack of transparency in STEs and

<sup>70</sup>See Uruguay Round Agreements Act (P.L. 103-465, sec. 411, Dec. 8, 1994).

<sup>71</sup>See 7 U.S.C. 5623 (1988, Supp. II 1990).

<sup>72</sup>See footnote 71.

<sup>73</sup>The Competition in 1996: Expenditures for Export Subsidies and Export Market Promotion Activities of Major U.S. Competitors in Global Market for Agricultural and Food Products, FAS, USDA (Washington, D.C.: Nov. 1996).

<sup>74</sup>We did not review studies of the effectiveness of EU or other competitor nations' agricultural export assistance programs.

<sup>75</sup>See Canada, Australia, and New Zealand: Potential Ability of Agricultural State Trading Enterprises to Distort Trade (GAO/NSIAD-96-94, June 24, 1996).

<sup>76</sup>STEs are generally considered to be governmental or nongovernmental enterprises that are authorized to engage in trade and are owned, sanctioned, or otherwise supported by the government.

<sup>77</sup>See International Trade: Canada and Australia Rely Heavily on Wheat Boards to Market Grain (GAO/NSIAD-92-129, June 10, 1990).

<sup>78</sup>According to USDA, the following example of the Australian Wheat Board's paying for an Indonesian wheat importer's son's university education illustrates why the United States must—in order to compete—have its own export assistance programs. To gain favor and access to the Indonesia's wheat market, the Australian Wheat Board paid for a prominent Indonesian wheat miller's son's university education in Australia. According to FAS, this wheat miller controls two-thirds of Indonesia's wheat milling industry. USDA officials state this example represents the type of competitive challenge that U.S. exporters face. Further, U.S. exporters are subject to the Foreign Corrupt Practices Act of 1977 (P.L. 95-213, Dec. 19, 1977). Therefore, USDA officials believe that U.S. exporters must rely on programs like MAP or FMDP to combat competitor nations' export practices.

other export assistance efforts by competitor nations, it is difficult to verify that USDA activities directly target foreign practices. Specifically, without better data on how competitor nations' agricultural export assistance programs are funded, to what markets and commodities they are targeted, and how effective they are in increasing agricultural exports, it is uncertain how well U.S. export programs match and counter these efforts.

Some studies have stated that competitors find U.S. export subsidies relatively inexpensive to offset.<sup>79</sup> For example, one researcher concluded that it is unlikely that EEP can cause the level of EU export subsidies to rise by more than 4 percent. The researcher also estimated that for every additional dollar the U.S. government spent exporting wheat under EEP, the EU had to spend only about 23 cents more on its own wheat and coarse grain export subsidies to offset EEP's impact.<sup>80</sup> Further, the Australian Bureau of Agricultural and Resources Economics similarly calculated that the cost to the EU of offsetting EEP was equal to only about 1.5 percent of the total EU agriculture budget for 1987 or 1988.<sup>81</sup> Another study noted that the increased cost of EU export subsidies from U.S. export subsidies appeared to be small.<sup>82</sup> Industry officials were divided in their assessment of how significantly U.S. export assistance programs have increased the cost of EU agricultural export assistance programs.

U.S. export assistance programs may in the short term increase market share and, thus, may help U.S. companies compete when these programs encourage importers to choose U.S. goods over those of competitors. For example, the availability of credit under the GSM-102 program or the market development effects of MAP and title I may influence importers to choose U.S. commodities. However, these programs are unlikely to have a sustained long-term impact, because competitors' own agricultural export assistance programs may counteract them (that is, offer better price or

<sup>79</sup>See G. Anania, M. Bohman, and C. Carter, "United States Export Subsidies in Wheat: Strategic Trade Policy or Expensive Beggar-Thy-Neighbor Tactic?" *American Agricultural Economics* (1992); Haley, "Evaluating The Export Enhancement Program Over 1991-95 Crop Years"; Haley, "The U.S. Export Enhancement Program: Prospects"; and, I. Roberts, et al., *U.S. Grain Policies and the World Market* (Canberra, Australia: Australian Bureau of Agricultural and Resources Economics, 1989).

<sup>80</sup>See Haley, "Evaluating the Export Enhancement Program," and Haley, "The U.S. Export Enhancement Program: Prospects."

<sup>81</sup>In 1987 and 1988, total EU export subsidies for grains were \$3.6 billion and \$3.5 billion, respectively, according to USDA. For those same years, EU export subsidies for wheat were estimated to have increased due to EEP by \$400 million and \$290 million, respectively. In contrast, total EU agricultural support outlays were approximately \$26 billion for 1987 and \$32 billion for 1988. See Roberts, et al., *U.S. Grain Policies*.

<sup>82</sup>Anania, Bohman, and Carter, "United States Export Subsidies in Wheat."

credit), and because there is no assurance that markets developed with U.S. export programs can be sustained without the continued use of these programs.

Finally, some studies<sup>83</sup> of U.S. agricultural export assistance programs have noted that countering foreign competitors' market-distorting practices with subsidies leads to lower prices and reduced market returns for producers in all countries. Several industry officials concurred with this observation. Also, export assistance programs such as EEP and credit guarantees may transfer many of the programs' benefits to foreign consumers instead of to U.S. producers by lowering the cost of importing U.S. agricultural commodities. For example, a study on EEP<sup>84</sup> has estimated that roughly 40 percent of the subsidy value has gone directly to foreign consumers or governments.<sup>85</sup>

## Divergent Views Exist on Whether U.S. Export Programs Promote U.S. Trade Negotiating Objectives

U.S. government officials and some private sector representatives argue that U.S. agricultural export assistance programs may provide negotiating leverage for the 1999 WTO agricultural trade talks. U.S. objectives for these negotiations will be to further liberalize global agricultural trade (that is, to further reduce tariffs and NTBS). The United States seeks further liberalization because global agricultural trade remains one of the most protected areas of world trade in terms of high tariffs and other trade barriers, such as tariff-rate quotas (TRQ).<sup>86</sup> Many of these trade barriers remain permissible under the WTO.<sup>87</sup> These officials state that the United States should not unilaterally eliminate these programs before 1999 because doing so would force the United States to come to the negotiating table with a much-reduced set of items for negotiation. Some public and private sector officials, however, challenge the idea that these programs provide leverage. They question the leverage that these programs provided during the Uruguay Round agricultural negotiations and believe that other

<sup>83</sup>See I. Roberts, et al., U.S. Grain Policies, and Anania, Bohman, and Carter, "United States Export Subsidies in Wheat."

<sup>84</sup>Robert L. Paarlberg, "Does the GATT Agreement Promote Export Subsidies: A Case of Unintended Consequences," International Agribusiness Management Association Meeting (May 1995).

<sup>85</sup>Some critics of U.S. agricultural export assistance programs believe that a more potent approach for increasing U.S. agricultural exports (than the use of these programs) would be to pursue broader trade negotiations that can help lower trade barriers and promote fairer trade.

<sup>86</sup>A tariff-rate quota system applies one tariff to imports up to a particular amount and a different, higher tariff rate to imports in excess of that amount.

<sup>87</sup>For a listing of agricultural trade barriers worldwide by countries, see 1997 National Trade Estimate Report on Foreign Trade Barriers, Office of the United States Trade Representative (Washington D.C.: U.S. GPO, 1997).

factors, such as internal pressure on the EU to further reform its agricultural policies, rather than U.S. agricultural export assistance programs, will have a greater impact on the success of the 1999 talks.

Program supporters state that the use or threatened use of these export programs was helpful in achieving the Uruguay Round's goal of agricultural liberalization. A former U.S. agricultural trade negotiator states that EEP helped pressure subsidizing competitors, particularly the EU, to come to the negotiating table and agree to reduce the use of subsidies. Program supporters reason that these programs could provide negotiating leverage for the 1999 WTO agricultural negotiations and thus give the United States leverage in negotiating reductions in tariffs, agricultural subsidies, and the types of trade barriers that have grown in importance since the Uruguay Round, such as STES, SPS barriers, and TRQS. USDA states that these assistance programs have also been valuable in negotiations to open up specific foreign markets. For example, USDA reports that in Japan, MAP efforts helped persuade consumers to question quotas on imported U.S. beef. This contributed to the 1984 market-opening talks for foreign meat products that were being negotiated between Japan and the United States.

USDA officials state that in order for U.S. agricultural export assistance programs to provide leverage, they must be consistently funded. For example, some U.S. food exporters cited EEP's peaks and valleys of funding over the last 5 years, and the fact that it was basically not used in fiscal year 1996, as weakening its potential leverage in future trade negotiations. USDA officials and these exporters believe that even though trade negotiations are very complex, with many dynamic interacting factors and that it is hard to quantify each program's potential negotiating contribution, the United States should not unilaterally eliminate any of these programs before the 1999 talks. They state that if we eliminate these programs, we then come to the negotiating table with a much-reduced set of items for negotiation. USDA reports its goal for the 1999 WTO negotiations is to further liberalize global agricultural trade.

One difficulty in assessing arguments for retaining U.S. agricultural export assistance programs based on the past negotiating leverage they have provided is that while these arguments are difficult to refute, they cannot be demonstrated empirically, much less evaluated by comparing costs to benefits.<sup>88</sup> Instead, these arguments rely heavily on anecdotal examples

<sup>88</sup>See Bruce Gardner, "The Political Economy of U.S. Export Subsidies for Wheat," Working Paper No. 4747, National Bureau of Economic Research (Cambridge, MA: May 1994), for a discussion of the interaction of EU policy changes and EEP.

and personal experience. Some public and private sector officials challenge the assertion that these programs provide leverage and their achievements in multilateral and bilateral negotiations. Specifically, they question the notion that EEP subsidies were instrumental in bringing the EU to the table in the Uruguay Round negotiations. For example, some of these officials report that EEP caused problems for the United States in gaining consensus with nonsubsidizing agricultural exporting nations during the Uruguay Round negotiations. They state that this may have limited the U.S. ability to negotiate further EU concessions in agriculture.<sup>89</sup> Further, some public and private sector officials believe that other U.S. efforts, such as the use or threatened use of 301 trade sanctions,<sup>90</sup> rather than EEP, were key in bringing competitor nations to the negotiations. Similarly, they question the effectiveness of a MAP-financed advertising campaign in creating domestic political pressure to open Japan's markets to foreign beef products. Rather, they cite U.S. diplomatic negotiating efforts; the threatened use of 301 trade sanctions; the fact that the United States had requested a GATT investigation regarding Japanese beef quotas;<sup>91</sup> and the efforts of other meat exporting nations, such as Australia, as being keys to opening this market.

Looking forward to the 1999 WTO negotiations, some private sector officials note that many of the trade barriers currently of interest, such as SPS measures, high tariffs, and TRQS, are problems in importing nations. Consequently, they question whether U.S. export assistance programs, which were not intended to address these types of barriers, will be useful in the WTO talks in gaining access to markets restricted by these barriers. For example, to the extent that some of these programs' subsidies are transferred to consumers in importing nations, these nations may not want to support the United States in giving up the programs through trade negotiations.

Further, some public and private sector officials believe that the EU—which in fiscal year 1996 spent over \$9.1 billion on agricultural export subsidies alone—will probably be the biggest factor in deciding whether or not the 1999 talks are a success. They believe that EU budgetary

<sup>89</sup>For example, Robert Paarlberg argues that U.S. leverage over the EU in the Uruguay Round negotiations was due to the threat that a deadlock in agriculture could block progress in more important negotiating areas such as trade in manufacturing and services. See Paarlberg, "Does the GATT Agreement Promote Export Subsidies."

<sup>90</sup>Section 301 of the Trade Act of 1974, as amended (19 U.S.C. 2411), serves as the U.S. government's principal mechanism for addressing unfair foreign trade practices. It gives the U.S. Trade Representative broad authority to enforce U.S. rights under bilateral and multilateral trade agreements and seeks to eliminate certain acts, policies, or practices of foreign governments that burden or restrict U.S. commerce.

<sup>91</sup>See *International Trade Reporter*, Vol. 5, #29 (July 20, 1988).

pressures, not U.S. agricultural export assistance programs, will provide the greatest incentive for the EU to continue to reform its agricultural domestic and export policies and thus help further liberalize global agricultural trade. Specifically, the cost of extending these EU domestic and export policies to the upcoming new EU members such as Poland, Hungary, and the Czech Republic (all of whom have sizable and protected agricultural sectors) is considerable. In fiscal year 1996, the EU spent about \$52.3 billion, or 47 percent of its budget, on domestic agricultural and export assistance programs. These officials question whether the EU will be able to extend this same level of support to the new members.

## Conclusion

The evidence suggests that while FAIR's domestic policy reforms will modestly help boost U.S. agricultural exports, other factors such as the ongoing liberalization of global agricultural trade and increased world demand, are expected to increase U.S. exports independent of FAIR. In fact, forecasts project growth in U.S. agricultural exports well beyond the record \$60 billion in 1996.

While FAIR's domestic policy reforms removed a primary benefit associated with most U.S. export assistance programs—the exporting of surplus stocks generated by domestic price supports—program proponents state that U.S. agricultural export assistance programs continue to have relevance because they

- benefit the overall U.S. economy,
- benefit the agriculture sector and/or specific commodities,
- counter competitor nations' agricultural export assistance programs, and/or
- provide leverage to support U.S. trade negotiating objectives.

The evidence we found is mixed regarding the contributions of U.S. agriculture export programs in these four areas. We found no conclusive support that the programs benefit the U.S. economy as a whole, through either expanded aggregate employment or output, or reduced trade or budget deficits. Regarding benefits to the U.S. agriculture sector, there is substantial research that concludes that these programs only modestly increase exports above and beyond what is likely to occur in their absence. More substantial benefits to the U.S. agricultural sector may come from these programs' contributions to countering foreign competitor export assistance and providing leverage for trade negotiations.

While we recognize substantial barriers continue to confront U.S. agricultural exporters around the globe, the effectiveness of existing programs to “level the playing field” by targeting trade barriers and competitor programs or by providing negotiating leverage remains uncertain. Without better data on the size, nature, and effectiveness of competitors’ export assistance programs and unfair trade barriers, it remains unclear how much the U.S. agricultural export programs contribute to countering these competitors’ efforts or provide negotiating leverage.

## Matter for Congressional Consideration

Given the mixed evidence concerning the continued relevance of U.S. agricultural export assistance programs, their decreased funding levels, and the trend toward increased liberalization of global agricultural trade from which the U.S. agricultural sector is likely to benefit with or without further government support, the Congress may wish to reassess the continued viability and/or focus of the programs the next time these programs are reviewed.

To support such an assessment, the Congress may wish to direct USDA to develop more systematic information on the potential strategic value of U.S. export assistance programs—for example, in countering competitor nations’ agricultural export programs or in providing negotiating leverage. Specifically, the Congress may direct USDA to develop more systematic information on (1) competitors’ programs and negotiating objectives and (2) how effective each U.S. agricultural export assistance program is in furthering U.S. interests. Once this information is in hand, the Congress may wish to refocus the thrust of the programs.

## Scope and Methodology

To assess how FAIR may affect U.S. competitiveness in world agricultural markets, we analyzed and synthesized the results of three tasks. First, to gain an understanding of the act’s impact, we conducted interviews with a wide range of U.S. and competitor nation agricultural experts.<sup>92</sup> Second, to corroborate these opinions and to obtain data on FAIR’s impact, we analyzed available studies and reports authored by some of these experts.

<sup>92</sup>Specifically, we interviewed officials from USDA (including FAS and ERS), the Department of State, the Office of the U.S. Trade Representative, the Congressional Budget Office, the Congressional Research Service, and OMB, as well as from the embassies of Canada, Australia, New Zealand, and the Delegation of the European Commission. We also interviewed agriculture experts from universities such as Harvard, Texas A&M, and Iowa State, and think tanks such as the Cato Institute, the Heritage Foundation, World Perspectives, and Sparks Inc. In addition, we interviewed representatives from agricultural trade associations such as the North American Export Grain Association and the American Farm Bureau Federation and agricultural businesses such as Cargill, Inc., and ConAgra, Inc.

---

Third, to obtain insights into the assumptions and variables that affect global agricultural trade, we reviewed and discussed the economic modeling results of USDA's ERS and FAPRI in Ames, Iowa.

To examine the continued relevance of U.S. agricultural export assistance programs, we performed three tasks. First, to understand the history, mission, and effectiveness of these programs,<sup>93</sup> we drew upon our prior work in this area.<sup>94</sup> Second, to develop a method for organizing the evidence regarding these programs' relevance, we took the benefits proponents state these programs provide and, in consultation with agricultural experts, constructed a framework that consists of four basic categories of potential program impact (for example, do these programs benefit the U.S. economy?). Third, to obtain evidence on the continued relevance of these programs,<sup>95</sup> we interviewed government officials, agricultural trade experts, and officials of the organizations previously mentioned and gathered applicable research, empirical evidence, and other information on the impact of these programs. Finally, we synthesized all the information to present the best evidence available on the continued relevance of U.S. export programs in furthering the four categories of impact. While we have worked to provide the best evidence available, we acknowledge that determining program relevance is difficult because many of the domestic and international conditions under which past observations of and research on these programs have been based have changed; thus, any assessment of the future relevance of these programs needs to be tempered with this understanding.

Lastly, we had a draft of this report peer reviewed for accuracy and objectivity by several public and private sector economists and agricultural experts.

We performed our review from June 1996 to May 1997 in accordance with generally accepted government auditing standards.

---

<sup>93</sup>For the purpose of this review, we focused on USDA's four types of agricultural export assistance programs. We did not examine other aspects of USDA efforts to increase U.S. agricultural exports, such as FAS' overseas offices which, according to USDA, provide a global strategic network to alert the U.S. private sector to export opportunities and market expectations, identify trade and marketing barriers, and gather information on U.S. competitors. In fiscal year 1995, FAS had an operating budget of about \$118 million to carry out its overseas functions and manage its various agricultural export assistance programs.

<sup>94</sup>See Related GAO Products.

<sup>95</sup>Regarding USDA market promotion efforts, for the purposes of this review, we focused more on MAP than on FMDP because FMDP was not significantly affected by or addressed in the FAIR legislation.

## Agency Comments and Our Evaluation

We provided a draft of this report to USDA for review and comment. We met with officials of the Department, including FAS' Associate Administrator and ERS' Deputy Director, and other senior management officials representing FAS' various export assistance programs. These officials agreed in principle to the report's conclusions and matter for congressional consideration. They also stated that the report provided insights into the complexity of isolating the impact of U.S. agricultural export assistance programs on U.S. agricultural exports, separate from the wide range of other variables that affect these exports.

They acknowledged that market forces, not these federal programs, were the greatest factor in increasing U.S. agricultural exports. However, FAS officials felt that the report was too negative about the programs and that the assumptions used preordained the outcome of our analysis. In particular, FAS officials stated that our focus on the macroeconomic impact of U.S. agricultural export assistance programs—including the assumption of full employment—imposed an unreasonably high standard that these programs should have a positive impact on the overall U.S. economy. They questioned whether this standard could be met by any federally funded program. Several senior FAS program managers added that U.S. agricultural export assistance programs were in fact designed to redistribute economic resources from other sectors of the U.S. economy to agriculture. FAS officials also felt that our presentation of studies regarding MAP's impact was selective and unbalanced.

In response to USDA's comments, we have expanded our discussion of MAP's impact to include five additional studies of the program. Though this expanded the number of countries and commodities targeted by MAP that we discuss, it did not alter our conclusions. In addition, while demonstrating a macroeconomic benefit is a high standard for any federal program, the requester was specifically interested in whether U.S. agriculture export assistance programs benefit the national economy, a claim that USDA has made in the past. Moreover, beyond the review of these programs' potential macroeconomic effects, we also reviewed their impact on the agricultural sector and specific commodities, on countering competitor export assistance programs, and on providing negotiating leverage. Regarding our use of the full employment assumption, our analysis of USDA programs' macroeconomic impact did consider the programs' effectiveness under conditions of less than full employment, as well as full employment. However, under either condition there was no evidence that these programs provide macroeconomic benefits. In addition, it should be noted that (1) our analysis of macroeconomic impact

---

under conditions of full employment is consistent with OMB guidance and (2) comments on our draft report from several public and private sector economists and agricultural experts indicated no disagreement with our methodology or analysis. Moreover, the consensus of these reviewers was that the report was accurate and balanced.

USDA officials suggested a number of technical revisions to our draft. We have incorporated them into the report where appropriate.

---

As arranged with your office, we will send copies of this report to the Senate and House Agriculture Committees, other interested congressional committees, the Secretary of Agriculture, and other interested parties. We will also make copies available to others on request. Major contributors to this report are listed in appendix II.

Please call me on (202) 512-8984, if you or your staff have any questions about this report.

Sincerely yours,

A handwritten signature in black ink, reading "Jayetta Z. Hecker". The signature is fluid and cursive, with the first name "Jayetta" written in a large, stylized script, followed by "Z." and "Hecker".

Jayetta Z. Hecker, Associate Director,  
International Relations and Trade Issues

---

# Contents

---

Letter	1
<hr/>	
Appendix I	38
Funding for U.S.	38
Agricultural Export	39
Assistance Programs	41
	42
<hr/>	
Appendix II	44
Major Contributors to This Report	
<hr/>	
Related GAO Products	47
<hr/>	
Figures	
Figure 1: Forecasted Average Annual Real GDP Growth Rates for Selected Regions, 1990-2005	10
Figure I.1: Export Subsidy Programs' Expenditures, Fiscal Year 1985-98	39
Figure I.2: Export Credit Guarantee Program Assisted Sales, Fiscal Year 1985-98	40
Figure I.3: Market Development and Promotion Program Expenditures, Fiscal Year 1985-98	42
Figure I.4: Public Law 480 Title I-Food Aid Expenditures, Fiscal Year 1985-98	43

---

**Abbreviations**

ARP	Acreage Reduction Program
CGE	computable general equilibrium model
COAP	Cottonseed Oil Assistance Program
CRS	Congressional Research Service
DEIP	Dairy Export Incentive Program
EEP	Export Enhancement Program
ERS	Economic Research Service
EU	European Union
FAPRI	Food and Agricultural Policy Research Institute
FAS	Foreign Agricultural Service
FAIR	Federal Agriculture Improvement and Reform Act
FMDP	Foreign Market Development Program
FOR	Farmer Owned Reserve Program
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product
GSM	General Sales Manager
HVP	high-value product
MAP	Market Access Program
NTB	nontariff barrier
OMB	Office of Management and Budget
SOAP	Sunflowerseed Oil Assistance Program
SPS	sanitary and phytosanitary
STE	state trading enterprise
TPCC	Trade Promotion Coordinating Committee
TRQ	tariff-rate quota
USDA	U.S. Department of Agriculture
WTO	World Trade Organization

# Funding for U.S. Agricultural Export Assistance Programs

---

This appendix presents detailed information about the U.S. Department of Agriculture's (USDA) four export assistance programs. These include export subsidy programs, export credit guarantee programs, market development and promotion programs, and food aid programs.

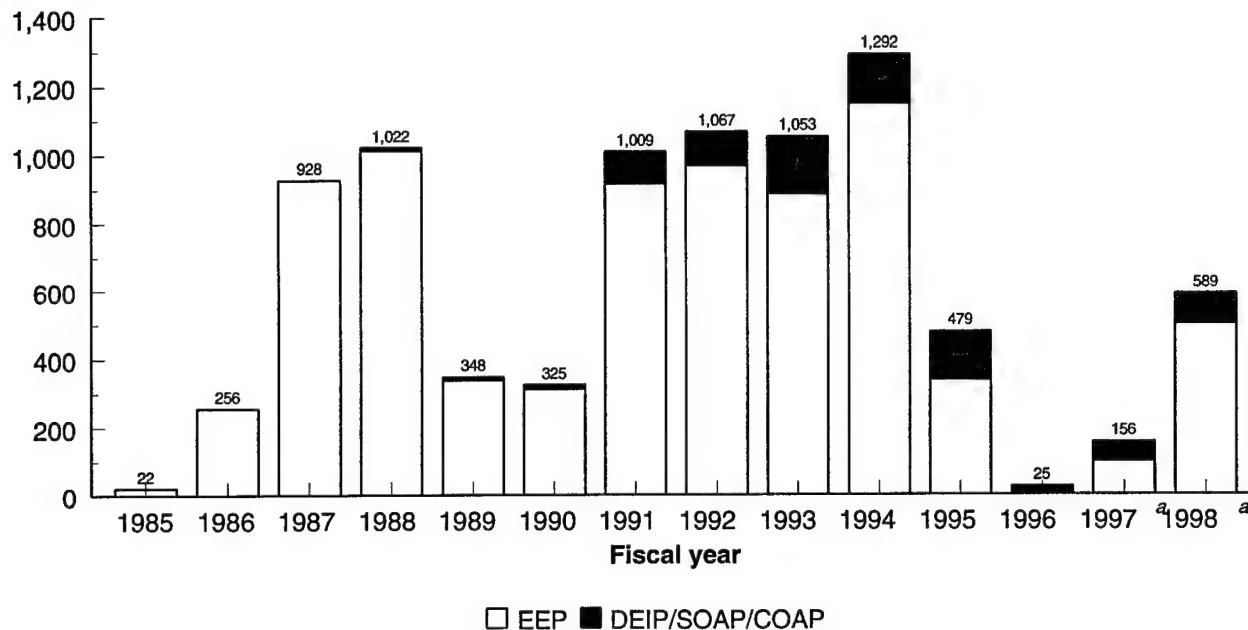
---

## Export Subsidy Programs

These programs are intended to help U.S. commodities become more price competitive on the world market. In the past, these programs have included the Export Enhancement Program (EEP), the Dairy Export Incentive Program (DEIP), the Sunflowerseed Oil Assistance Program (SOAP), and the Cottonseed Oil Assistance Program (COAP). EEP has been the largest of these programs in terms of government funding and, according to USDA, has been used to pressure foreign nations to reduce trade barriers and eliminate trade-distorting practices. During 1996, EEP was not fully utilized due to market conditions—tight supply and high international demand—that did not warrant its use. The Federal Agriculture Improvement and Reform (FAIR) Act of 1996 did not reauthorize the SOAP and COAP programs. See figure I.1 for expenditures on all export subsidy programs in fiscal years 1985-98.

Figure I.1: Export Subsidy Programs' Expenditures, Fiscal Year 1985-98

Dollars in millions



<sup>a</sup>Estimated fiscal year 1997-98 program levels.

Source: Foreign Agricultural Service (FAS), USDA.

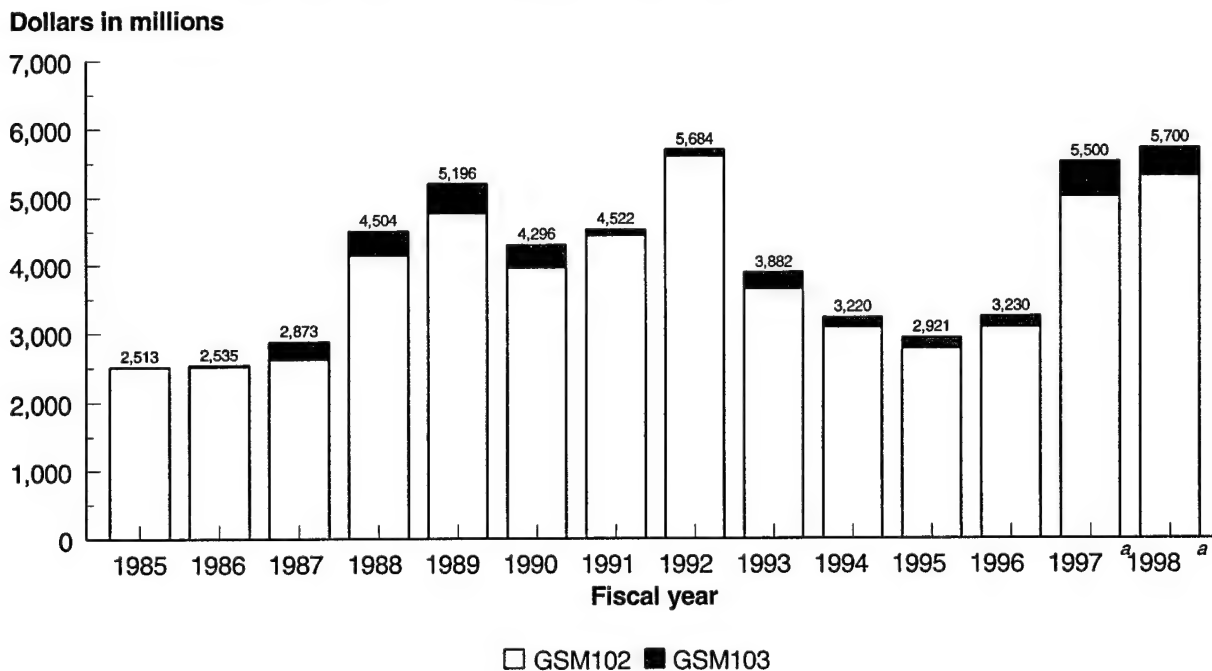
## Export Credit Guarantee Programs

The export credit guarantee programs are intended to develop, expand, or maintain U.S. agricultural markets overseas by facilitating access to export credit for countries that do not have adequate commercial credit available. These programs encourage U.S. lenders to extend credit to foreign importers to purchase U.S. agricultural commodities. USDA has two types of export credit guarantee programs, also known as the General Sales Manager (GSM) programs. The GSM-102 program offers short-term commercial credit guarantees for periods of up to 3 years. The second program, known as GSM-103, offers intermediate-term loan guarantees and repayment periods of 3 to 10 years. The GSM export credit guarantee programs are funded under the auspices of USDA's Commodity Credit Corporation. In fiscal year 1996, these programs provided credit

**Appendix I**  
**Funding for U.S. Agricultural Export**  
**Assistance Programs**

guarantees on agricultural exports valued at \$3.2 billion.<sup>1</sup> The FAIR Act established that not less than \$5.5 billion was to be made available annually for credit guarantees through 2002. The act allows greater flexibility in terms of how much is made available for each program. The act also allows credit guarantees on high-value products (HVP) with at least 90 percent U.S. content by weight. See figure I.2 for assisted sales amounts for fiscal year 1985-98 export credit guarantees.

**Figure I.2: Export Credit Guarantee Program Assisted Sales, Fiscal Year 1985-98**



Note: The Export Credit Guarantee Program was established in 1980 and, as of January 1997, the government has paid out approximately \$2.1 billion in claims because of loan repayment defaults and reschedulings by foreign buyers.

<sup>a</sup>Estimated fiscal year 1997-98 program levels.

Source: FAS, USDA.

<sup>1</sup>According to the Commodity Credit Corporation, the export subsidy amount in fiscal year 1996 was \$327.4 million.

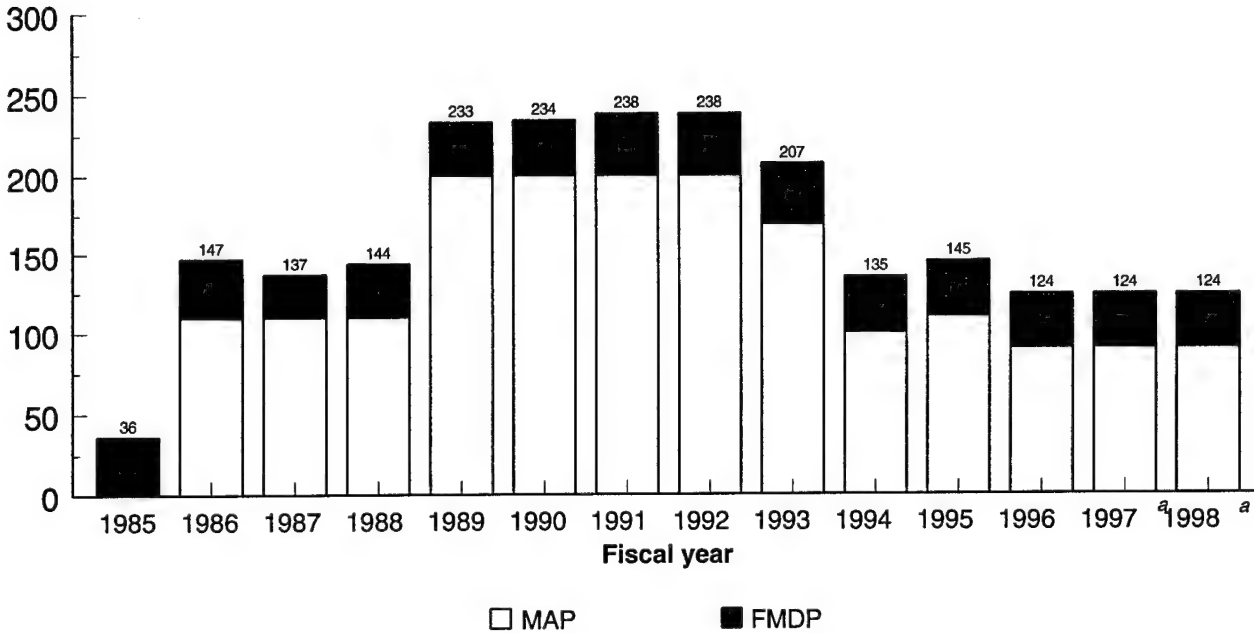
---

## Market Development and Promotion Programs

These programs are intended to develop, maintain, and expand foreign markets for U.S. agricultural products through subsidies for advertising and market promotion. In the 1950s, the federal government created several market development and export promotion programs. Today, FAS is responsible for (1) the Foreign Market Development Program (FMDP) and (2) the Market Access Program (MAP). These programs provide funds to commercial firms and not-for-profit organizations to promote U.S. agricultural commodities in foreign markets. FMDP (also known as the Cooperator Program) is intended to help develop export markets and promote U.S. agricultural commodities—typically for bulk, or generic, products. MAP, on the other hand, is used primarily to assist in developing markets for high-value or processed products. In 1996, FMDP contributions by the U.S. government were capped at \$34 million. The FAIR Act capped funding authority for MAP at \$90 million for each fiscal year from 1996 to 2002. See figure I.3 for expenditures on market development and promotion programs in Fiscal Year 1985-98.

Figure I.3: Market Development and Promotion Program Expenditures, Fiscal Year 1985-98

Dollars in millions



<sup>a</sup>Estimated fiscal year 1997-98 program levels.

Source: FAS, USDA.

## Public Law 480 Title I-Food Aid

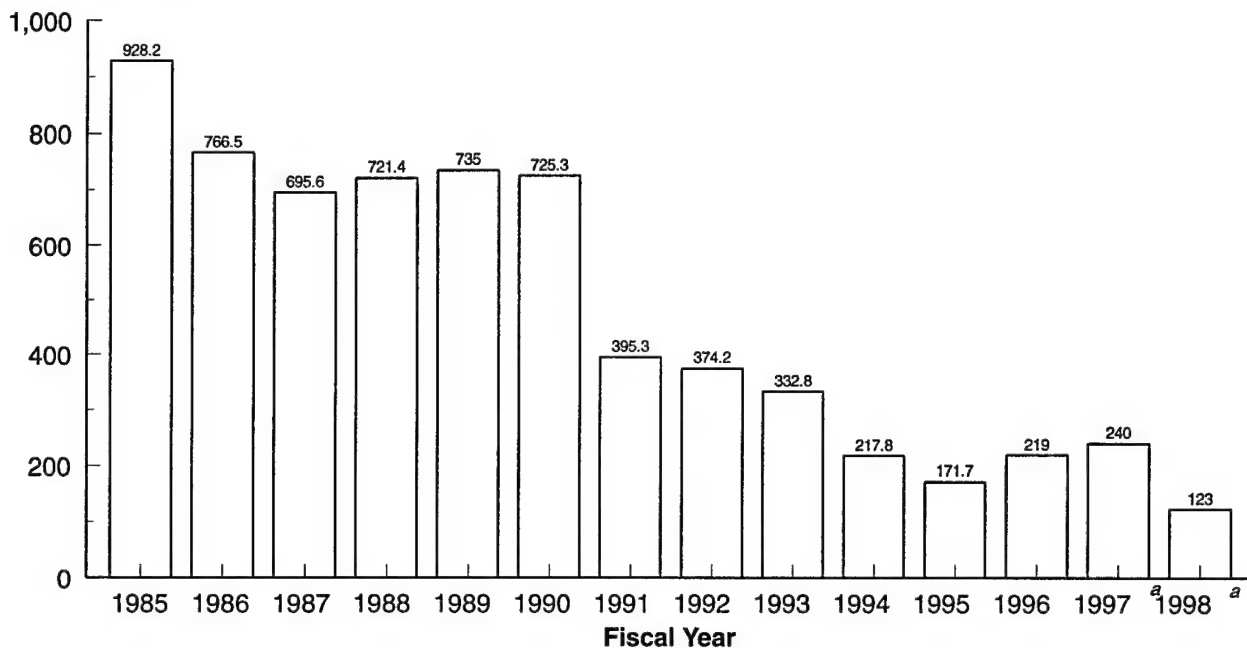
The Public Law 480 food aid program is intended to enhance the food security of developing countries through the use of agricultural commodities and local currencies to (1) combat world hunger and malnutrition and their causes; (2) promote sustainable economic development, including agricultural development; (3) expand international trade; (4) develop and expand export markets for U.S. agricultural commodities; and (5) encourage the growth of private enterprise and democratic participation in developing countries. In fiscal year 1996, USDA reported that this program resulted in the export of approximately \$370 million, or 1.2 million metric tons, of U.S. commodities. The FAIR Act extends the authority of the United States to enter into new Public

Appendix I  
Funding for U.S. Agricultural Export  
Assistance Programs

Law 480 agreements through 2002. Further, it authorizes, for the first time, Public Law 480 title I agreements with private entities. The act also modifies repayment terms for title I credit, including elimination of the 10-year minimum repayment period and reduction of the maximum grace period from 7 to 5 years.<sup>2</sup> See figure I.4 for Public Law 480 expenditures for fiscal year 1985-98.

Figure I.4: Public Law 480 Title I-Food Aid Expenditures, Fiscal Year 1985-98

Dollars in millions



Note: fiscal year 1988-96 based on registered sales. Transportation costs are not included.

<sup>a</sup>Estimated fiscal year 1997-98 program levels.

Source: FAS, USDA.

<sup>2</sup>USDA also administers the donation program under section 416(b) of the Agricultural Act of 1949, as amended by section 302 of P.L. 83-480, (July 10, 1954) (7 U.S.C. 1431(b)), which provides agricultural commodities held in U.S. government inventories to needy countries. There were no commodities available for programming in fiscal years 1996 and 1997 due to low inventories. In addition to USDA food aid programs, there are two food aid programs administered by the Agency for International Development (the title II emergency and private assistance programs and the title III food for development program).

---

# Major Contributors to This Report

---

National Security and  
International Affairs  
Division, Washington,  
D.C.

Phillip J. Thomas  
Kurt W. Kershow  
Kurt A. Burgeson  
Gezahegne Bekele  
Emil E. Friberg Jr.  
Rona H. Mendelsohn

---

Office of the General  
Counsel, Washington,  
D.C.

Richard P. Burkard  
Herbert I. Dunn

---

Office of the Chief  
Economist,  
Washington, D.C.

Loren Yager  
Daniel E. Coates

---

San Francisco Field  
Office

Christine M. Broderick

---

**Appendix II**  
**Major Contributors to This Report**

---

---

**Appendix II**  
**Major Contributors to This Report**

---

---

# Related GAO Products

---

Addressing the Deficit: Budgetary Implications of Selected GAO Work for Fiscal Year 1998 (GAO/OCG-97-2, Mar. 14, 1997).

Export-Import Bank: Reauthorization Issues (GAO/T-NSIAD-97-147, Apr. 29, 1997).

Canada, Australia, and New Zealand: Potential Ability of Agricultural State Trading Enterprises to Distort Trade (GAO/NSIAD-96-94, June 24, 1996).

Farm Bill Export Options (GAO/GGD-96-39R, Dec. 15, 1995).

U.S. Department of Agriculture: Foreign Agricultural Service Could Benefit From Better Strategic Planning (GAO/GGD-95-225, Sept. 28, 1995).

State Trading Enterprises: Compliance with the General Agreement on Tariffs and Trade (GAO/GGD-95-208, Aug. 30, 1995).

Food Aid: Competing Goals and Requirements Hinder Title I Program Results (GAO/GGD-95-68, June 26, 1995).

Agricultural Trade: Competitor Countries' Foreign Market Development Programs (GAO/T-GGD-95-184, June 14, 1995).

Export Promotion: Rationales for and Against Government Programs and Expenditures (GAO/T-GGD-95-169, May 23, 1995).

Former Soviet Union: Creditworthiness of Successor States and U.S. Export Credit Guarantees (GAO/GGD-95-60, Feb. 24, 1995).

Agricultural Trade: Five Countries' Foreign Market Development for High-Value Products (GAO/GGD-95-12, Dec. 14, 1994).

Cargo Preference Requirements: Objectives Not Significantly Advanced When Used in U.S. Food Aid Programs (GAO/GGD-94-215, Sept. 29, 1994).

International Trade: Impact of the Uruguay Round Agreement on the Export Enhancement Program (GAO/GGD-94-180BR, Aug. 5, 1994).

Public Law 480 Title I: Economic and Market Development Objectives Not Met (GAO/T-GGD-94-191, Aug. 3, 1994).

---

General Agreement on Tariffs and Trade: Uruguay Round Final Act Should Produce Overall U.S. Economic Gains (GAO/GGD-94-83A&B, July 29, 1994).

High-Value Product Exports: Good Potential Exists for More Trade With Taiwan, Malaysia, and Indonesia (GAO/GGD-94-52, Nov. 19, 1993).

U.S. Department of Agriculture: Issues Related to the Export Credit Guarantee Programs (GAO/T-GGD-93-28, May 6, 1993).

Loan Guarantees: Export Credit Guarantee Programs' Costs Are High (GAO/GGD-93-45, Dec. 22, 1992).

---

### Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. VISA and MasterCard credit cards are accepted, also. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

**Orders by mail:**

U.S. General Accounting Office  
P.O. Box 37050  
Washington, DC 20013

**or visit:**

Room 1100  
700 4th St. NW (corner of 4th and G Sts. NW)  
U.S. General Accounting Office  
Washington, DC

Orders may also be placed by calling (202) 512-6000  
or by using fax number (202) 512-6061, or TDD (202) 512-2537.

Each day, GAO issues a list of newly available reports and testimony. To receive facsimile copies of the daily list or any list from the past 30 days, please call (202) 512-6000 using a touchtone phone. A recorded menu will provide information on how to obtain these lists.

For information on how to access GAO reports on the INTERNET, send an e-mail message with "info" in the body to:

[info@www.gao.gov](mailto:info@www.gao.gov)

or visit GAO's World Wide Web Home Page at:

<http://www.gao.gov>

United States  
General Accounting Office  
Washington, D.C. 20548-0001

Bulk Rate  
Postage & Fees Paid  
GAO  
Permit No. G100

Official Business  
Penalty for Private Use \$300

Address Correction Requested

